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IN THE

Supreme Court of the United States

OCTOBER TERM, A. D. 1933.

No. 440

BENJAMIN F. LINDHEIMER, ERNEST J. KRUETGEN, ANDREW OLSON, G. GALE GILBERT, PHIL. W. COLLINS, PAUL SAMUELL and CHARLES E. BYRNE, the persons constituting the Illinois Commerce Commission of the State of Illinois, and OTTO KERNER, Attorney General of the State of Illinois,

Appellants,

and

CITY OF CHICAGO, a municipal corporation,

Appellant,

vs.

ILLINOIS BELL TELEPHONE COMPANY,

Appellee.

APPEAL FROM DISTRICT COURT OF THE UNITED STATES, FOR THE NORTHERN DISTRICT OF ILLINOIS, EASTERN DIVISION (3746).

BRIEF AND ARGUMENT FOR APPELLANTS.

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CHAMPLIN-SHEALY COMPANY, CHICAGO 365

INDEX.

	PAGE
Explanation of Terms	1
Statement of the Case	5
Specification of Errors	17

ARGUMENT.

Summary of Argument	21
Discussion of Specific Points of Brief and Errors of District Court	49-544
Allocation of Chicago Intrastate Exchange Service Revenues to Interstate Toll Service	49-80
Preliminary statement	49
What the District Court did	49
Summary statement of Appellants' contentions	51
Contention Numbered I:	
Appellee's Allocation of a portion of the Chicago Exchange Service Revenues to Interstate Toll Business violated the direction of this Court of December 1, 1930, in this case	52
Contention Numbered II:	
Appellee's claim that its Chicago Exchange Service rates compensate it for every interstate use of its Chicago exchange plant facilities produces fantastic results	54
Contention Numbered III:	
Appellee's allocation assumes but does not prove that an alleged universal understanding to the effect that its Chicago exchange service rates compensate the exchange service operator for every interstate use of its exchange plant facilities has application to Chicago	60

PAGE

A. Appellee's claim disregards its fifty years' history of exchange service rate-making..... 60

B. Appellee's claim disregards its fifty years' history of its contractual relations with the operators of the interstate toll services..... 65

Contention Numbered IV:

The extension of the scope of the filed Chicago Exchange service rates to cover an unfiled alleged universal understanding that such rates compensate Appellee for every interstate use of its Chicago Exchange plant facilities violates the provisions of the Illinois statutes regulating Appellee's operations as a public utility 72

Contention Numbered V:

Appellee did not prove the existence of a universal understanding that exchange service rates compensate the exchange service operator for every interstate use of its exchange plant facilities..... 75

A. Appellee failed to prove the existence of a universal understanding covering interstate uses by non-subscribers of the exchange service..... 75

B. Appellee failed to prove the existence of a universal understanding covering the interstate uses by subscribers of the exchange service 78

License Contract Services and Payments.....81-232

Introduction..... 81

What the District Court did..... 83

Appellants' position 86

PART I 89

AMERICAN COMPANY'S EXPENSE OF DEVELOPMENT AND RESEARCH 89

Preliminary Statement of Facts..... 89

Beneficiaries of American Company's Development Work classified 91

PAGE

Class I.—Beneficiaries of Inventions embodied in Telephone Communication Equipment..... 91

Class II.—Beneficiaries of the American Company's Inventions embodied in Special Commercial Products 92

Summary Statement of Appellants' Contentions.... 95

Contention Numbered I:

The allocation to Western's sales of telephone communication equipment of the portion of the American Company's Development and Research Expense applicable to special commercial products unjustly enriched the American Company by $5,226,141 cash royalties received from 1923 to 1931, inclusive, and by the value of the right to receive thereafter royalties for the use in such field of its inventions developed prior thereto, and by the excessive return on its investment in Products.... 97

Contention Numbered II:

The allocation to Western's sales of telephone communication equipment of the portion of the American Company's Development and Research expense applicable to the other four licensed manufacturers of such equipment unjustly enriched the American Company by a substantial portion of more than $20,000,000 received from them during the period 1923 to 1931, inclusive, and the value of the right to receive thereafter royalties from them. 106

Contention Numbered III:

The allocation to Western's Bell sales of the portion of the American Company's Development and Research expense applicable to Western's distributors for resale unjustly enriched the American Company by a substantial portion of more than $20,000,000 received from them during the period 1923 to 1931, inclusive, and by the value of the right to receive thereafter royalties from them.. 116

PAGE

Contention Numbered IV:

The allocation of the Bell System portion of the American Company's Development and Research expense between the Associated Companies, on the one hand, and the American Company's Long Lines on the other hand, on the basis of plant in service, unjustly enriched the American Company by more than $20,000,000 126

A. Appellee allocated pooled expenses of work covering problems having dissimilar application to and dissimilar results on dissimilar operations of dissimilar plants of the Associated Companies, on the one hand, and of the Long Lines, on the other hand 127

B. Appellee's allocation assumes but does not prove that the allocation on the basis of plant investment of the pooled expenses having dissimilar applications to and having dissimilar effects on the Associated Companies and on the Long Lines will produce a fair result to each of them 129

C. Appellee's allocation by classification between the Associated Companies and the Long Lines did not and could not prove the reasonableness of its allocation of the Bell portion of development and research expense between the Associated Companies and the Long Lines 131

D. The American Company was unjustly enriched by Appellee's allocation, approved by the District Court, at the expense of the Associated Companies for the period 1923 to 1931, inclusive, by an amount in excess of $20,000,000 162

Contention Numbered V:

The allocation to the license contract payment of the portion of the American Company's Development

PAGE

and Research expense applicable to it as the Holding Company investor in the Associated Companies, and as the licensor of Western to manufacture and sell to them products embodying the result covered by such expense, unjustly enriched the American Company by more than $6,000,000.. 167

Contention Numbered VI:

The District Court's finding that the entire amount of charge to license contract payments to cover Development and Research expense should be allocated to operating expense and no part thereof to fixed capital account, unduly burdened Appellee's customers to the extent of from 25% to 75% of such charge during the years 1923 to 1931, inclusive 171

PART II 174

THE AMERICAN COMPANY'S EXPENSE OF DIRECT DISTRIBUTION OF NEW SECURITIES AND OF SERVICING OUTSTANDING SECURITIES 174

Preliminary Statement 174
What the District Court did..... 176
Summary Statement of Appellants' Contentions.... 178

Contention Numbered I:

The American Company's Holding Company operations as investor in Appellee do not come within the license contract 179

Contention Numbered II:

The American Company as the investor in Appellee is not entitled to reimbursement of expenses of raising funds to make or maintain its investment in the stock of Appellee 180

A. The reimbursement to the American Company violates the orders of the Illinois Commerce Commission under which the American

PAGE

Company purchased stock in Appellee and is contrary to law 181

B. Appellee's showing of alleged savings through concentrated holdings of its stock is illusory. 182

PART III 184

THE AMERICAN COMPANY'S EXPENSE OF OPERATING TEN DEPARTMENTS 184

What the District Court did 184

Summary Statement of Appellants' Contentions 186

Contention Numbered I:

Appellee's allocation produces a fantastic result 187

Contention Numbered II:

The American Company's Holding Company operations as investor in Appellee do not come within the license contract 193

Contention Numbered III:

The American Company is not entitled to reimbursement of expenses incurred in its own operations incident to its ownership of the stock of Appellee. 193

PART IV 194

THE AMERICAN COMPANY'S $30,395,000 APPROPRIATION TO RESERVE FOR CONTINGENCIES 194

What the District Court did 194

Summary Statement of Appellants' Contentions ... 195

Contention Numbered I:

The District Court disregarded Appellee's license contract in force to September 25, 1930, covering the American Company's obligation for patent protection in the use of telephonic appliances and its relation to the alleged reserves which the District Court claimed the American Company set up as financial protection against its consequences ... 196

PAGE

Contention Numbered II:

The American Company's appropriations from 1924 to 1928, inclusive, to its Reserve for Contingencies created in 1900 were not intended by it to be and could not legally become a reserve against financial liability on its patent protection obligation to Appellee 201

Contention Numbered III:

The amount of the appropriations to the Reserve for Contingencies can not become the measure of compensation to the American Company for the benefits of its obligations for patent protection . . 208

Contention Numbered IV:

The District Court's finding that the entire amount of charge to license contract payments to cover patent protection should be allocated to operating expense and no part thereof to fixed capital account unduly burdened Appellee's customers to the extent of at least 40% of such charge during the years 1923 to 1931, inclusive 214

PART V 217

CONSIDERATIONS RECEIVED BY THE AMERICAN COMPANY APPLICABLE AS ADDITIONAL COMPENSATION FOR LICENSE CONTRACT SERVICES NOT CONSIDERED BY THE DISTRICT COURT 217

Summary Statement of Appellants' Contentions 217

Contention Numbered I:

The American Company did not reimburse Appellee for its expenses incurred in the direct distribution in Appellee's territory of the American Company's new issues of securities 218

Appellee's Services 219

A. Sale of American Company's securities to public 219

PAGE

B. Buying and selling stock rights and taking stock subscriptions 219
C. Employees' stock plan 220
D. Total remittances 221
Compensation to Appellee for selling American Company's securities 221
A. Employees' stock plan 221
B. Selling securities to the public 222
C. Sales of stock rights and subscriptions 223

Contention Numbered II:
Appellee received no credit for financing the Central Union properties to liquidate $17,500,000 frozen assets of the American Company and to relieve it of incurring further losses in connection therewith 224

Contention Numbered III:
Appellee received no credit for the surrender of its right under Section 10 of the original license contract of 1881 to participate in the receipts and profits of the long distance business in Chicago as part consideration for the license contract arrangement in effect during the period of the litigation 229

Contention Numbered IV:
Appellee received no credit for its proportion of the $14,395,799 profit made by the American Company in 1927 on the sale to the Associated Companies of the telephone instruments theretofore leased to them 231

Western's Profits and Prices 233-315
Preliminary Statement 233
This Court's direction 236
What the District Court did 236
Summary Statement of Appellants' Contentions .. 239-245

PAGE

Contention Numbered I:

The District Court's findings on Western's rate of return from Bell business separated from non-Bell business produce fantastic results 245

Contention Numbered II:

Appellee's separation of Western's total operating expenses between Bell and non-Bell sales, as separate classes of business, on the basis of their respective "standard shop costs of sales," disregards established principles of law applicable thereto 247

A. Western's standard shop costs bear no relation to the conditions under which its products are manufactured 251

B. The gross variations between the actual and standard cost of entire production in each year are substantial and represent corresponding substantial variations in Western's profits from Bell sales and from non-Bell sales considered as separate classes of business... 253

C. Appellee's distribution of the gross variations of entire production each year between Bell and non-Bell sales on the basis of their respective standard shop costs of sales assumes but does not prove that each class of sales was a fair and representative cross-section of their combined sales of each such year 256

D. Appellee's distribution of the gross variations of entire production of each of the periods 1916 to 1932, inclusive, and 1923 to 1932, inclusive, between the Bell and non-Bell sales of each such period considered as a single unit of time on the basis of their respective standard shop costs of sales assumes but does not prove that each class of sales for each period was a fair and representative cross-section of the combined sales of each such period 257

PAGE

estimates upon which Appellee's charge of confiscation for each year of the litigation was predicated and sustained 281

Contention Numbered VIII:

The standards applied by the District Court to determine the reasonableness of Western's prices and profits on Bell business did not and could not determine their reasonableness for any one year or over a period of years 284

A. The District Court's finding that Western's rate of profit on Bell business has been less than one-half of that made by other manufacturers proves nothing as to the reasonableness of its prices and earnings in such business for any one year or over a period of years 285

B. The District Court's finding that Western's rate of earnings on its undepreciated and depreciated average investment in its Bell business "has been substantially one-third lower than" that of other manufacturing companies of comparable risks and hazards, proves nothing as to the reasonableness of its prices and earnings in such business for any one year or over a period of years 287

C. The reduction in prices to its Bell customers during the period 1921 to 1929, inclusive, did not and could not prove that Western's return from its Bell business on such prices before or after each such reduction was reasonable 294

Contention Numbered IX:

Percentage figures related to Western's depreciated or undepreciated "average investment" in Bell business as found by the District Court have no significance whatsoever as a yardstick by which to determine the reasonableness of Western's earn-

PAGE

ings from Bell business for any one year or over a period of years 296

A. The amount of reserve for Pension Fund should be deducted from gross assets in determining the investment on which to compute a rate of return to Western's investors 297

B. The amount of Notes Payable to Trustees of Pension Fund should be deducted from gross assets in determining the investment on which to compute a rate of return to Western's investors 298

C. The amount of Working Reserves should be deducted from gross assets in determining the investment on which to compute a rate of return to Western's investors 299

D. The amount of current notes payable should be deducted from gross assets in determining the investment on which to compute a rate of return to Western's investors 300

E. The amount of cash from non-operating activities should not be included as part of the investment on which to compute a rate of return to Western's investors 303

Contention Numbered X:

Western's net earnings from Bell business as determined by the District Court, from the prices used in the estimates upon which the charge of confiscation for each year of the litigation was predicated and sustained, are excessive 304

Contention Numbered XI:

Western's earnings from Bell business as found by the District Court, are understated in each of the years 1924 to 1929, inclusive 307

A. Appellee improperly deducted over $7,000,000 from current income of the years 1924 to 1927, inclusive, to make up the excess of original

PAGE

cost of plant in service over their prognosticated reproduction value during the ensuing ten to fifteen years 308

B. Appellee improperly deducted $7,275,000 from current income for the years 1925 to 1927, inclusive, to make up underaccruals of the years prior to 1923 for its pension fund liability .. 310

C. Appellee improperly deducted $1,831,000 from current income of 1928 to cover depreciation on machinery for the years 1924 to 1927, inclusive, in excess of the amount charged during such years 312

D. Appellee improperly deducted against current income of the years 1924 to 1929, inclusive, $4,100,000 for depreciation on tools, furniture and fixtures in excess of the yearly amounts allowed by the Internal Reveune Department 313

Contention Numbered XII:

The District Court's findings render impossible the determination of the extent to which Western's excessive returns enter into the estimates upon which the charge of confiscation for each year of the litigation was sustained 314

A. The per cent of net earnings to Bell sales as found by the District Court does not and cannot measure the extent to which the prices used in the District Court's findings were excessive 314

B. The District Court's findings do not permit determination of the extent to which the depreciation expense allowance and rate base value as found by it were inflated by the excess profits of Western included in the prices used in arriving at such findings 315

PAGE

Rate Base Value 316-347

Preliminary Statement 316

What the District Court did 317

Appellants' Position 319

Summary Statement of Appellants' Contentions 320

Contention Numbered I:

The District Court's findings of fair rate base value produce fantastic results 324

A. Plant other than land, buildings and general equipment—Telephone Plant 324

B. Buildings 325

C. Total physical property 326

Contention Numbered II:

Appellee's method could not possibly produce, for any year of the litigation a reproduction cost new estimate of its telephone plant, exclusive of overheads 328

A. Appellee's use of the book cost of gross additions and retirements as the base to which it applied its index numbers, preserves in its result the higher costs (1) of manufacturing materials and (2) of construction labor, which prevailed prior to various improvements therein, and (3) of piecemeal construction ... 330

B. Appellee's method of computing its material index assumes but does not prove that Appellee's gross additions each year beginning with 1911 consisted of the identical items and quantities as the selected items and quantities of the 1923 plant accounts which Appellee used in its computations 333

C. Appellee's method of computing its labor index assumes but does not prove that Appellee's gross additions were constructed each year from 1911 to 1923 by a gang makeup cor-

PAGE

responding to the theoretical gang makeup based on the average labor conditions of the entire period 1911 to 1923, inclusive, considered as a single unit of time..... 337

D. On the record it is impossible to determine the extent of distortion produced by Appellee's use of book cost of gross additions and retirements and index numbers to arrive at its reproduction cost new estimate..... 340

Contention Numbered III:

The reproduction cost new estimates of telephone plant can not measure the fair value new of such property 343

A. The District Court's findings of Fair Value New are inconsistent with its findings on Western's Profits and Prices..... 343

B. The basis upon which Appellee made its presentation of Western's Profits and Prices precludes the possibility of using Western's current prices in the reproduction cost new estimates as fair value..... 345

Contention Numbered IV:

Appellee's reproduction cost new estimates of all physical property for each of the years 1923 to 1929, inclusive, and those for the years 1930 and 1931 as adjusted, did not make an honest and intelligent forecast as to the probable prices and wage levels during a reasonable period in the immediate future 347

A. Western's current prices used in each Reproduction Cost New Estimate from 1923 to 1929, inclusive, and for 1930 and 1931, inclusive, as adjusted by the District Court, cannot represent fair value determined in compliance with the McCardle Case..... 348

B. The District Court's acceptance as fair value of the average of the beginning and end of the

PAGE

year reproduction cost new estimates of buildings is contrary to its findings on Western's profits and prices 349

C. Foreseeable conditions indicating cheapening of plant and reduction in prices were disregarded by the District Court 350

Contention Numbered V:

The overhead charges included in Appellee's Reproduction Cost New Estimates for each year were improperly determined to form the basis for a valid finding of Fair Value New 352

A. Appellee is not entitled to capitalize overheads which it charges as operating expense, under the special conditions of this record 354

B. Appellee's method of computing the theoretical overheads unjustly enriches its investors on the additional capital invested during the period of the litigation 355

C. Appellee's inclusion of theoretical overheads in excess of book overheads on the basis that the property will be rebuilt is a repudiation of the basis on which its current prices estimates of the telephone plant were predicated 355

Contention Numbered VI:

The Rate Base Value which is based on Appellee's Book Cost of property is more than the Fair Value thereof on which Appellee is entitled to a return .. 356

Contention Numbered VII:

The District Court's method of computing Going Value as part of the Rate Base was improper and unduly burdened the telephone service charges during the period of the litigation 358

A. The District Court's method of computing Going Value unjustly enriches Appellee's investors on the additional capital invested during the period of the litigation 359

PAGE

B. The use by the District Court of Appellee's reproduction cost new estimate of each year as the base to which it applied the 8% figure to determine Going Value, renders the amount thereof arbitrary and grossly excessive..... 361

Contention Numbered VIII:

The District Court's findings on fair rate base value should have deducted from the reproduction cost new of the depreciable property of each year a percentage thereof equal to the percentage which the amount of Appellee's depreciation reserve was of the undepreciated book cost of such property as of the same date..... 361

A. That portion of the depreciation reserve which represents the advance contributions made prior to and during the period of the litigation, inclusive, for anticipated depreciation on contemplated future additions to central office equipment and buildings, should be deducted from the rate base to prevent the unjust enrichment of Appellee..... 363

B. The use by Appellee of the straight line method of determining depreciation expense charges on property in service involves the principle that it has no right to a return on the amount of property cost which is represented by the balance in the depreciation reserve 365

C. Appellee's method of computing the reproduction cost new of its property to arrive at the rate base on which it is entitled to a return requires that it should be reduced by the percentage thereof equal to the percentage which the amount of Appellee's depreciation reserve was of the undepreciated book cost of such property as of the same date..... 370

D. The District Court's finding on the per cent of the reproduction cost new which should be deducted in arriving at the fair rate base value

PAGE

is a compromise fiat and has no support either in law or in fact..... 371

Depreciation Expense Charges.....378-448

Preliminary Statement 378

What the District Court did..... 378

Summary Statement of Appellants' Contentions..... 379

Contention Numbered I:

The District Court disregarded the evidentiary value of and the legal consequence to be attached to the Commission's 1920 Order on depreciation expense charges as a valid legislative act, in determining the net income produced by the telephone rates prescribed by that Order..... 383

A. The State of Illinois, by statute in 1914, exercised its prerogative to compel Appellee to accept the State's judgment when expressed by the Commission as to the amount of depreciation expense charges on intrastate telephone property to be covered by its telephone rates for intrastate telephone service..... 383

B. No legislative act of the State of Illinois, and no judicial determination since January 1, 1921, has destroyed or modified the binding force of the 1920 order on depreciation expense charges in the determination of the net income produced by the telephone rates prescribed by that order..... 388

C. On the present pleadings and record no ground exists to hold void the 1920 Order on depreciation expense charges..... 389

D. The District Court substituted itself for the Illinois Commission as the administrative tribunal 391

PAGE

Contention Numbered II:

The District Court disregarded the evidentiary value of and the legal consequences to be attached to the 1923 Order on depreciation expense charges as a legislative act in determining the net income estimated to be produced by the telephone rates prescribed by that order 392

Contention Numbered III:

The District Court could not make a valid finding on depreciation expense charges on the basis of the recorded depreciation expense charges 395

A. Appellee is not constitutionally entitled to recover advance reimbursement for anticipated consumption in service of future additions to buildings and central office equipment contemplated to be acquired and to be placed in the service from time to time to 1974 395

B. Appellee's use of the straight line method of computing the advance contributions is in violation of law 409

C. Appellee's financial program to provide advance contributions produces the fantastic result of making its telephone customers involuntary investors who provide a large portion of its current capital in service without their right of interest therein 413

D. Appellee's financial program to provide the advance contributions is based on and gives effect to arbitrary assumptions 415

E. Appellee's justification for its financial program to provide advance contributions is based on and gives effect to arbitrary assumptions 422

PAGE

Contention Numbered IV:

The District Court could not make a valid finding on depreciation expense charges on the basis of Appellee's showing of its recorded depreciation expense charges adjusted "to make the amounts of such allowances correspond with the present value of the property at the time such amounts were set up on the books of the Company" 433

A. Appellee's financial program to provide annual advance contributions for anticipated depreciation on contemplated future additions to Buildings and Central Office equipment precludes the possibility of using the reproduction value of property in service as a base for the computation of the amounts thereof 434

B. The investors in Bell Telephone securities "are not primarily interested in property, as such, but are interested in safeguarding the money invested in the property which so far as it will some day be lost in operations, is, therefore, what should be covered by the depreciation provision" 436

C. The present record precludes the possibility of reaching the same conclusion of fact as that to which this Court attached legal consequences in the United Railways Case (280 U. S. 234), to-wit: the conclusion of fact that the cost of retired property at the time of replacement "is for all practical purposes present value" 439

D. The base which Appellee used in its depreciation expense computations was not the "present value" of the property which this Court in the United Railways Case held was the proper base for depreciation expense computations in respect to the property covered thereby 440

E. Appellee's position before the District Court in 1932 repudiates the position which it took

PAGE

in the 1929 hearings in this case, in the regular course of its business in relation to its investors, and before the Interstate Commerce Commission, since the decision in the United Railways Case 441

Contention Numbered V:

The District Court could not make a valid finding on depreciation expense charges on the basis of the experience of other Associated Companies in respect to depreciation expense charges as disclosed in the record 442

Contention Numbered VI:

The District Court could not make a valid finding on depreciation expense charges on the basis of the 1920 and 1923 Orders on depreciation, made applicable to the reproduction cost new of Appellee's property 447

Contention Numbered VII:

On the basis of the District Court's findings on depreciation expense charges, it is impossible to determine the extent to which they are based on any one or more of the classes of evidence to which it claimed it gave consideration 448

Fair Return 449-544

Preliminary Statement 449

What the District Court did 449

Summary Statement of Appellants' Contentions 453

Contention Numbered I:

Appellee's Recorded Return from its Chicago Intrastate business under the existing rates for each year of the litigation, without giving effect to the District Court's adjustments thereto, was more than the required minimum return to avoid confiscation 455

A. The issue of the constitutional inadequacy of the attacked rates must be determined by view-

PAGE

ing the expected experience under the attacked rates in relation to Appellee's actual experience under the existing rates 455

B. Appellee's position taken in its pleadings before the Commission and District Court and its course of conduct during the period of the litigation prove conclusively that the Recorded Return from its Chicago Intrastate business under the existing rates was constitutionally adequate during each year thereof 458

C. Appellee's actual experience under the existing rates during the period of the litigation proves conclusively that Appellee's Recorded Return from its Chicago Intrastate business under the existing rates without giving effect to the District Court's adjustments thereto, in each of the years thereof, was more than the required minimum to avoid confiscation 461

Contention Numbered II:

The reduction in Appellee's Recorded Return from its Chicago Intrastate business under the existing rates which would have resulted if the attacked rates had been in effect would not have caused confiscation in any of the years of the litigation 487

A. The net income available for return under the attacked rates as found by the District Court is compensatory for each year of the litigation 487

B. The net income available for return under the attacked rates as found by the District Court but adjusted to give effect to Appellants' adjustments, is compensatory for each year of the litigation 497

Contention Numbered III:

The District Court's findings of the required minimum return to avoid confiscation produced fantastic results when applied to Appellee's actual experience during the period under investigation 499

PAGE

Contention Numbered IV:

The District Court's use of the investment experience outside the Bell System in its application to Appellee of the comparative return test of compensatory rates of the Willcox Case was fatally defective 507

A. Unsupported general statements or judicial notice covering post-war returns on corporate investments outside the Bell System should not be accepted as adequate proof in support of a finding of confiscation 507

B. Unsupported general statements or judicial notice covering returns on investments of corporations outside the Bell System whose entire property values are represented by outstanding securities should not be accepted in support of a finding of confiscation 526

C. The application of the returns on corporate investments outside the Bell System to test the inadequacy of Appellee's return to its investors from the attacked rates, as found by the District Court, disregards the special character of the return to Appellee's investors resulting from the District Court's findings on Separation of Revenues, License Contract Payments, Depreciation Expense, and Western 528

Contention Numbered V:

Appellee's showing of the percentage resulting from the American Company's average carrying charges related to average outstanding credit and capital obligations plus surplus cannot be used to support the District Court's findings of the required minimum rate of return and on the inadequacy of the attacked rates 537

Conclusion 545

Table of Cases Cited.

PAGE

Bluefield Water Works Improvement Co. v. Public Service Commission of Virginia, 262 U. S. 679 (1923) 15, 22, 450, 458, 462, 499, 500, 501, 508

Board v. Great Northern Ry. Co., 281 U. S. 412 (1930) 392

Board of Utility Commissioners v. New York Tel. Co., 271 U. S. 23 (1926) 55, 369

Brine v. Insurance Co., 96 U. S. 627 (1877) 391

Bursh Electric Co. v. City of Galveston, 262 U. S. 443 (1923) 508

Case v. Kelly, 133 U. S. 21 (1890) 391

Chesapeake & Potomac Tel. Co. v. Whitman, 3 Fed. (2nd) 938 ..... 375, 469

Chesapeake and Potomac Tel. Co. of Virginia v. Commonwealth of Virginia, 147 Va. 43 (1927) 331, 332, 469

Chicago Tel. Co. v. Illinois Mfg. Assn., 106 Ill. App. 54 (1903) 61, 62

Cincinnati & Suburban Bell Tel. Co. v. Public Utilities Commission, 148 N. E. 817 (1925) 441

City of Fort Smith v. Southwestern Bell Tel. Co., 270 U. S. 627 (1926) 508

City of Minneapolis v. Rand, 285 Fed. 818 (1923) 508

Denver v. Denver Water Co., 246 U. S. 178 (1915) 499, 500, 508

Depreciation Charges of Telephone Companies, 118 I. C. C. 295 (1926) 385

Depreciation Charges of Telephone Companies, 177 I. C. C. 351 (1931) 367, 368, 375, 376, 408, 416, 422, 447

Fort Smith v. Southwestern Bell Tel. Co., 270 U. S. 627 (1926) 508

Galveston Electric Co. v. Galveston, 258 U. S. 388 (1922) 409, 508

Harkin v. Brundage, 276 U. S. 36 (1928) 392

PAGE

Havre de Grace & Perryville Bridge Co. v. Towers, 132 Md. 16, 103 Atl. 319 (1918) 384, 385

Houston v. Southwestern Bell Tel. Co., 259 U. S. 318 ..... 53, 71

Ill. Bell Tel. Co. v. G. Gale Gilbert et al., 3 Fed. (Supp.) 595 (1933) 5

Joplin Gas Co. v. Public Service Commission, 296 Fed. 271 (1924) 508

Kansas v. Southwestern Bell Tel. Co., 115 Kan. 236 (1924) 441

Kellogg Switchboard and Supply Co. v. Michigan Bell Tel. Co., 2 Fed. Supp. 335 (1932) 212

Knoxville v. Knoxville Water Co., 212 U. S. 1 (1909) 384, 407, 439

Lincoln Gas & Electric Co. v. Lincoln, 250 U. S. 256 ..... 409, 508

Los Angeles Gas & Electric Co. v. Railroad Commission, 289 U. S. 287 (1933) (77 L. ed. 820) 351, 416, 462

McCardle v. Indianapolis Water Co., 272 U. S. 400 (1926) 42, 331, 347, 348, 350, 351, 356, 376, 377, 440, 508, 519

Michigan Public Utilities Commission v. Michigan State Tel. Co., 228 Mich. 658 (1924) 441

Minneapolis v. Rand, 285 Fed. 818 (1923) 508

Minnesota Rate Cases, 230 U. S. 352 (1913) 247

Missouri, etc., Trust Co. v. Krumseig, 172 U. S. 351 (1899) 391

Missouri ex rel. S. W. Bell Tel. Co. v. Public Service Commission, 262 U. S. 276 (1923) 384, 394

Missouri Rate Cases, 230 U. S. 474 (1913) 55, 80, 247, 263, 415, 502

New York Tel. Co. v. Prendergast, 36 Fed. (2nd) 54 (1929) 55, 360, 367, 368

Ohio Valley Water Co. v. Ben Avon Borough, 253 U. S. 287 (1920) 384, 393

Orvis v. Powell, 98 U. S. 176 (1878) 391

Pacific Gas Co. v. San Francisco, 265 U. S. 403 (1924). 82
In Re Pacific Tel. & Tel. Co., P. U. R. 1923, A. 531.... 74
Pacific Tel. & Tel. Co. v. Whitcomb, 12 Fed. (2nd) 279.. 71
Patterson v. Mobile Gas Co., 271 U. S. 131 (1926).... 508
Penn Mutual Life v. Lederer, 252 U. S. 523 (1919).... 82
Railroad Commission v. Maxey, 281 U. S. 82 (1930).. 392
Reno Power, Lt. & Water Co. v. Public Service Commission, 298 Fed. 790 (1923)..... 508
Smith v. Ill. Bell Tel. Co., 269 U. S. 531..... 6
Smith v. Ill. Bell Tel. Co., 282 U. S. 133 (1930).....
6, 16, 52, 53, 55, 71, 83, 105, 247, 295, 369, 385, 391, 392, 394, 416, 462, 501, 528
Smyth v. Ames, 169 U. S. 466 (1898).....499, 501
Southern Bell Tel. & Tel. Co. v. Railroad Commission of Georgia, 274 Fed. 438; 262 U. S. 761.....71, 74
S. W. Bell Tel. Co. v. Public Service Commission, 262 U. S. 276 (1923).....105, 500, 501, 508, 521, 539, 541
United Fuel Gas Co. v. Commission, 278 U. S. 300 (1929).....319, 392
United Railways & Electric Co. v. West, 280 U. S. 234..
46, 365, 367, 369, 381, 382, 384, 391, 407, 433, 436, 437, 438, 439, 440, 441, 462, 463, 477, 500, 501, 509, 524, 527
Wabash Valley Electric Co. v. Young, 287 U. S. 488 (1933).....463, 501
Western Distributing Co. v. Public Service Commission, 285 U. S. 119 (1932)..... 230
Willcox v. Consolidated Gas Co., 212 U. S. 19 (1909)..
.....15, 352, 450, 452, 499, 500, 501
Wood v. Vandalia R. Co., 231 U. S. 1 (1914)..... 248

STATUTES.

PAGE

Alabama—Code 1923, Secs. 9763, 9764, 7035, 9770 (rates) 387

Alabama—Code 1923, Sec. 9786-9788 (accounts)..... 387

Arkansas—Crawford & Moses Sess. Laws, 1921-1923, Act 124, Sec. 17..... 386

Connecticut—Gen. Stat. 1918, Sec. 3735, Laws 1920-1921, C. 3280 386

Georgia—Acts 1878-1879, Title 12, Sec. VI..... 386

Georgia—Parks Ann. Code 1914, Sec. 2663..... 386

Illinois—Laws, 1913, p. 468.....385, 387

Illinois—Laws, 1913, Art. IV, Sec. 33, pp. 476-477..... 388

Illinois—Laws, 1921, Art. IV, Sec. 33, p. 720, R. I. 87.. 388

Indiana—Burns' Ann. Indiana Stat., 1926, Vol. 3, Secs. 12693-12696, p. 1245..... 367

Iowa—Code, 1924, Sec. 7910 (Electric Companies)... 386

Kansas—1923 Rev. Stat., Secs. 66-108, 66-110, 66-117. 386-7

Kansas—Rev. Stat. 1923, Secs. 66-122..... 386

Louisiana—Marr's Ann. Rev. Stat. Supp. 1926. pp. 1275-1276 (Commission Council of City of New Orleans) 387

Maine—Rev. Stat. 1916, C. 55, Sec. 19..... 386

Maine—Rev. Stat. 1916, C. 55, Secs. 25, 46, Laws 1923, C. 31, Secs. 43, 45, 48..... 387

Maryland—Ann. Code (Bagby) 1924, Art. 23, Sec. 387. 386

Maryland—Ann. Code (Bagby) 1924, Art. 23, Secs. 387, 396 387

Massachusetts—Gen. Laws 1921, C. 164, Secs. 81, 93.. 387

Michigan—Acts 1923, p. 150 (Electric Companies)... 387

Michigan—Compiled Laws, 1915, Sec. 4847 (Electric Companies)..... 386

Montana—Rev. Code 1921, Secs. 3897-3899..... 387

Montana—Rev. Code 1921, Sec. 3885..... 386

New Mexico—Laws 1921, C. 94 387
Nevada—Rev. Laws 1922, Sec. 18, p. 3157 386
Nevada—Rev. Laws 1922, p. 3159 387
New York—McKinney's Consol. Laws 1926, Supp. Book 47, Secs. 65, 66 (Gas and Electric Companies) 386, 387
North Carolina—Consol. Stat. 1919, Sec. 1066 387
North Dakota—Comp. Laws 1913, Sec. 4609 ..... 386, 387
Oklahoma—Comp. Laws 1921, Sec. 3463 387
Rhode Island—Gen. Laws 1923 ..... 386, 387
South Carolina—Code of 1922, No. 525 386
South Carolina—Code of 1922, p. 1786 387
United States—Hepburn Act, June 29, 1906, C. 3591, Sec. 7, 34 Stat. 594, as amended Act, February 28, 1920, C. 91, 41 Stat. 493 386
United States—Sec. 15 (1) Interstate Commerce Act, as amended by Transportation Act, February 28, 1920, C. 91, Sec. 418 (1), 41 Stat. 484 386
United States—41 Stat. 493, Act February 28, 1920, C. 91 386
Vermont—Gen. Laws 1917, Sec. 5061 (IV) 5066 387
Virginia—Code of 1924, Sec. 4071 387
Washington—Remington's Comp. Stat. 1922, Sec. 10390 (Gas, Electric and Water Companies) 387
Washington—Remington's Comp. Stat. 1922, Sec. 10416 386
Washington—Laws of Washington, 1933, pp. 611-12 .. 386
West Virginia—Barnes' Code, 1923, C. 150, Sec. 26 ... 386
Wyoming—Comp. Stat. 1920, Secs. 5467, 5472, 5496 ..... 386, 387

IN THE

Supreme Court of the United States

OCTOBER TERM, A. D. 1933.

No. 440

BENJAMIN F. LINDHEIMER, ERNEST J. KRUETGEN, ANDREW OLSON, G. GALE GILBERT, PHIL. W. COLLINS, PAUL SAMUELL and CHARLES E. BYRNE, the persons constituting the Illinois Commerce Commission of the State of Illinois, and OTTO KERNER, Attorney General of the State of Illinois,

Appellants,

and

CITY OF CHICAGO, a municipal corporation,

Appellant,

vs.

ILLINOIS BELL TELEPHONE COMPANY,

Appellee.

APPEAL FROM DISTRICT COURT OF THE UNITED STATES, FOR THE NORTHERN DISTRICT OF ILLINOIS, EASTERN DIVISION (3746).

BRIEF AND ARGUMENT FOR APPELLANTS.

EXPLANATION OF TERMS.

American Bell	American Bell Telephone Company, predecessor of American Telephone & Telegraph Co.
American Company	American Telephone & Telegraph Company.
Appendix	Note: The Appendix is printed in a separate volume.
Associated Companies	Licensee companies of the American Company in the United States.
A. T. & T.	American Telephone & Telegraph Company.
Automatic Electric	Automatic Electric Company, an Illinois corporation.
Bluefield Case	*Bluefield Waterworks & Improvement Co.* v. *Public Service Commission of West Virginia*, 262 U. S. 679.
Central Union	Central Union Telephone Company.
Chicago Company	Chicago Telephone Company to 1921, and Illinois Bell Telephone Company since 1921.
Commission	The Illinois Public Utilities Commission prior to 1921, and the Illinois Commerce Commission, successor thereto thereafter.
Denver Water Company Case	*Denver* v. *Denver Water Company*, 246 U. S. 178.
Graybar	Graybar Electric Company.
Houston Case	*Houston* v. *Southwestern Bell Tel. Co.*, 259 U. S. 318.

International Standard Electric	International Standard Electric Company, successor to International Western Electric Co.
International Western	International Western Electric Company, Inc., a subsidiary of Western.
Los Angeles Case	*Los Angeles Gas & Electric Co.* v. *Railroad Commission*, 289 U. S. 287.
McCardle Case	*McCardle* v. *Indianapolis Water Co.*, 272 U. S. 400.
Minnesota Rate Cases	Minnesota Rate Cases, 230 U. S. 352.
Missouri Rate Cases	Missouri Rate Cases, 230 U. S. 424.
Northern Electric	Northern Electric Company, Ltd.
O.R.	Old Record, being Volumes I to VII of the record in this case before this Court in the October Term 1930, containing the evidence introduced during the 1929 hearings.
Products	Electrical Research Products, Inc., a subsidiary of Western.
R. .... Record	Note: Roman numeral following "R." (for example R. I) indicates Record Vol. I. Similarly R. I, 40—for example — indicates Record Vol. I, page 40.
Smith Case	*Smith* v. *Illinois Bell Tel. Co.*, 282 U. S. 133.
Southwestern Bell Case	*State of Missouri ex rel. Southwestern Bell Tel. Co.* v. *Public Service Commission of Missouri*, 262 U. S. 276.

Telephone plant . . .	Appellee's physical property exclusive of land, buildings and general equipment.
United Railways Case .	*United Railways & Electric Co. of Baltimore* v. *West*, 280 U. S. 234.
Wabash Valley Electric Case	*Wabash Valley Electric Co.* v. *Young*, 287 U. S. 488.
Western	Western Electric Company, an Illinois corporation to 1915, and a New York corporation since 1915.
Western Union . . .	Western Union Telegraph Co.
Willcox Case	*Willcox* v. *Consolidated Gas Co.*, 212 U. S. 19.

BRIEF ON BEHALF OF APPELLANTS.

Opinion of the District Court.

The Opinion of the District Court (R. III, 2502) is reported in 3 Fed. (Supp.) 595 (1933).

Jurisdiction.

This is a direct appeal from a final decree (R. III, 2524), entered on June 28, 1933, by the District Court of the United States for the Northern District of Illinois, Eastern Division, pursuant to Section 266 of the Judicial Code, enjoining from enforcement, on grounds of confiscation, the rates for telephone service in the City of Chicago prescribed by the final Order of the Illinois Commerce Commission made August 16, 1923 (O.R. I, 14). This Court found jurisdiction on October 9, 1933. On motion by Appellants, this case was advanced and oral argument set for January 15, 1934.*

Appellee filed a Cross-Appeal (R. IX, 4969).

Statement of the Case.

Appellants here are the members of the Illinois Commerce Commission (hereinafter referred to as Commission), the Attorney General of the State of Illinois, who were defendants in the Court below, and the City of Chicago which was permitted to intervene as a defendant (O.R. I, 178). Appellee is the Illinois Bell Telephone Company

*A copy of this brief and the Appendix were delivered on November 27, 1933, to each of Appellee's counsel as per agreement of counsel.

(hereinafter referred to as Company), which was complainant in the Court below.

The Commission's Order of August 16, 1923, the enforcement of which was enjoined below, reduced the rates for four classes of coin box telephone service charges as fixed by the Public Utilities Commission (the predecessor of the present Commission) by Order of December 20, 1920 which is still in force (R. III, 2485). On December 21, 1923, the District Court granted the Company a temporary injunction, upon condition that it agree to refund to its subscribers the amounts paid by them in excess of the sums chargeable under the Commission's Order, should the relief prayed be finally denied. This fund now aggregates in excess of $18,200,000 exclusive of interest (R. VII, 4082).

Upon appeal by Appellants, the interlocutory decree was affirmed by this Court on October 19, 1925 (*Smith* v. *Illinois Bell Telephone Co.*, 269 U. S. 531). A final decree was entered on February 28, 1930 (O.R. I, 199). Appeal therefrom was taken to this Court and reversal had (*Smith* v. *Illinois Bell Telephone Co.*, 282 U. S. 133). Appellants' motion for a decree dismissing the Bill of Complaint was denied by Order of the District Court (R. III, 2484). Appellants' Motion in this Court for leave to file Petition for the Writ of Mandamus for the annulment of said Order was denied on April 13, 1931 (283 U. S. 794). Appellants' Appeal to this Court from such Order was dismissed May 25, 1931 (283 U. S. 808).

The final decree herein (R. III, 2524), incorporating by reference the District Court's Opinion of April 29, 1933 (R. III, 2502), was entered on June 28, 1933, after two years of exchange of information, extensive takings of depositions by Appellants in New York City (R. III, 2495, 2498), on motions by Appellants for the production of docu-

ments (R. III, 2493; R. IX, 4973), and after five months' hearings had been had commencing February 23, 1932, on the additional evidence adduced in pursuance of the Mandate of this Court (R. III, 2479).

The District Court found the intrastate revenues for each of the years 1923 to 1931, inclusive, on the basis of Appellee's presentation.

The District Court found the operating expenses under the existing rates, on the basis of Appellee's presentation, subject to three adjustments. It reduced Appellee's license payment as proper operating expense for the years 1923 to 1928, inclusive. Such reductions ranged from $31,000 to $631,000 per year (Appendix, p. 128). It reduced the depreciation expense charges for each of the years 1923 to 1931, inclusive. Such reductions ranged from $1,100,000 to $2,100,000 per year (Appendix, p. 95). It reduced the maintenance charges as operating expenses in the year 1931 by $366,000 (Appendix, p. 128).

The District Court found, on the basis of Appellee's presentation, the amounts by which the intrastate net earnings would have been reduced if the rates in suit had been effective. Such reductions ranged from $1,270,000 in the year 1932 to $1,740,000 in the year 1929 (R. III, 2521).

The District Court found the rate base, for the years 1923 to 1931, inclusive, on the basis of Appellee's presentation, subject to four adjustments: It reduced Going Value from 15% of the reproduction cost new estimate to 8% thereof (R. III, 2392-3; 2516). It increased the deduction from the reproduction cost new of the property to represent depreciation in valuation, from 9% thereof for the years 1923 to 1927, inclusive, as claimed by Appellee, to 16% thereof, and increased the deduction

from 8% thereof, as claimed by Appellee for the years following thereafter, to 15% thereof (R. IV, 2850a; R. III, 2516). It reduced Appellee's reproduction cost new estimate for the years 1930 and 1931 as fair value by 10% thereof in each case to eliminate, as the District Court claimed, the effect of an increase of 10.2% in Western's prices in the year 1930, which prices were used by Appellee in its 1930 and 1931 reproduction cost estimate (R. III, 2519; Appendix, pp. 86, 93). It then made some further slight adjustments to round out the dollars involved (Appendix, pp. 93, 86). It found a rate base value for the year 1932 and stated that it was based on the maintenance of the 1929 price level of Western (R. III, 2508-9). The record closed July 1, 1932. The rate base in each year was based on the average of the reproduction cost new estimates at the beginning and end of the year of revaluation.

The District Court found 7½% as a fair return for the years 1923 to 1927 instead of 8% as claimed by Appellee; 7% for each of the years 1928 to 1930, inclusive, as claimed by Appellee; 6½% for 1931 and 5½% for 1932, instead of 7½% and 8%, respectively, as claimed by Appellee (R. III, 2591, 2397).

The District Court found that Appellee's return under the existing rates for the years 1923 to 1931, inclusive, ranged from 4.8% to 5.8%, and that if the rates in suit had been in effect, the rate of return under the attacked rates would have been from 4% to 4.9% per year (R. III, 2521).

The District Court made no finding covering the adequacy or inadequacy of the return under the existing rates but found the attacked rates confiscatory for each year of the litigation and at the date of its decree (R. III, 2522).

The District Court found Appellee's separation of interstate and intrastate property, revenues and expenses to be

"reasonably accurate" (R. III, 2504). Appellee's separation included the allocation to interstate toll services of substantial amounts of intrastate exchange service gross and net revenues under the existing rates and under the rates in suit. Such amounts range from $260,000 to $650,000 per year (R. VII, 4354a).

The District Court found the license payments as proper operating expenses for the period 1923 to 1927, inclusive, to be from $1,650,000 to $1,900,000 per year. Such amounts covered rental of telephone instruments and services. For the years 1928 to 1931, inclusive, it allowed from $830,000 to $1,030,000 per year. Such amounts for these years covered services only as the telephone instruments had been sold to the Associated Companies in 1927 (R. III, 2509-12). The allowances for the years 1923 to 1928, inclusive, covered Appellee's portion of the American Company's total expenses allocated to License Contract operations (R. III, 2519-20). Such allowances for the years 1929 to 1931, inclusive, covered Appellee's License Contract payments to the American Company, which were less than Appellee's portion of the American Company's total expenses found by the District Court applicable to its License Contract operations (R. III, 2520). Included in the District Court's allowances for each year were amounts ranging from $590,000 to $790,000—and aggregating $6,129,428 for the period 1923 to 1931, inclusive—to cover (R. I, 861-4): (1) a portion of the American Company's Development and Research expense—aggregating $46,000,000 for the period—to develop inventions, whose use the American Company licensed to five manufacturers for valuable consideration; (2) a portion of the American Company's expenses—aggregating $11,032,000 for the period—applicable to it as a Holding Company investor of the securities of the Associ-

ated Companies. Such expenses were incurred by the American Company in direct sales to its own investors of new issues of securities during the period of the litigation, and in servicing all of the American Company's outstanding securities; (3) a portion of the American Company's expenses—aggregating $52,516,000 for the period—to operate ten departments, whose operations are concerned in whole or in part with its functions as such Holding Company investor; (4) a portion of the $30,395,800 appropriated by the American Company from 1924 to 1928, inclusive, to its Reserve for Contingencies. The District Court's allowances for each year did not give effect to (1) the American Company's use, without proper compensation, of Appellee's facilities and personnel in the sale of more than $52,000,000 of the American Company's securities in Appellee's territory; (2) the American Company's use of Appellee's resources, credit and management to finance the Central Union properties to liquidate $17,500,000 frozen assets of the American Company and to relieve it of further losses in connection therewith; (3) Appellee's surrender of its right to participate in the current receipts and profits of the American Company's Long Distance business transacted in Chicago as consideration for the use of the Chicago Exchange plant facilities in such business; (4) Appellee's portion of the $14,395,799 profit made by the American Company in 1927 in the sale to the Associated Companies of the telephone instruments theretofore licensed by it to them (R. VI, 4024).

The District Court found as proper annual depreciation allowances ranging from $4,000,000 to $7,400,000 per year (R. III, 2520). Such allowances, the District Court stated, gave consideration (1) to Appellee's recorded depreciation expense charges computed on the basis of the original

cost of depreciable property, (2) to the allowances by the 1920 Order and by the 1923 Order, (3) to such charges and allowances adjusted in each case to give effect to the "present value" of the property to which they were applicable, and (4) to the experience of the Associated Companies (R. III, 2513). Such annual allowances were from $1,100,000 to $2,100,000 less than Appellee's corresponding claims for each year computed on the basis of the reproduction cost new estimate of its depreciable property. They were from $220,000 to $733,000 less than Appellee's corresponding book figures for each year based on the original cost of its property. They were from $1,100,000 to $1,500,000 more than the corresponding yearly allowances prescribed by the 1920 Order. They were from $1,200,000 to $3,400,000 more than the corresponding yearly allowances by the 1923 Order (Appendix, p. 95).

Approximately 40% of Appellee's claimed and recorded depreciation expense charges covered depreciation on buildings and central office equipment in service and anticipated depreciation on contemplated future additions thereto expected to be acquired and to be placed in service from time to time to 1974 (Appendix, p. 96). Appellee's practice in respect thereto was also the practice of the Associated Companies whose experience was considered by the District Court (R. II, 1181, 1201). The District Court did not find void either the 1920 or the 1923 order on depreciation expense charges. The allowances by the Commission's Orders were made pursuant to statutory provision of Illinois, obligating Appellee to conform its depreciation expense charges to the amounts prescribed by the Commission.

The District Court found that Appellee's purchases from Western during the period 1923 to 1931, inclusive, chargeable to construction accounts, ranged from $8,100,000 to

$17,300,000 per year; that its purchases during the same period attributable to maintenance and other expense accounts, ranged from $1,400,000 to $4,500,000 per year (R. III, 2516-7). In addition to use in purchases, Western's prices entered in the following manner into the estimates upon which the charge of confiscation was predicated and sustained for each year: Western's *current prices of each year of the litigation* were used also in Appellee's reproduction cost new estimate of each such year; on the basis of such estimates the District Court predicated its findings on Rate Base Value and on Depreciation Expense charges. In such estimates Western's current prices of the year of revaluation beginning with 1923 were used to convert to the price level each of such years the book cost of most of the gross additions and retirements of each year of the period prior thereto and back to 1911 (R. I, 16).

The District Court found that Western's sales to Appellee "have been a reasonable, fair and representative cross section" of its sales to the Bell System; that Western's earning experience with the Bell System over the period under investigation fairly corresponded to its experience with Appellee in the same period (R. III, 2519). It found that on account of Western's permanent relations to the Bell System several factors entered into Western's operations making for variable earnings from year to year, and that "it is, therefore, necessary in arriving at what are reasonable earnings on investment and profit on sales in the Bell business of Western, to take into consideration the results of a period of years and not merely a single year" (R. III, 2507-8). The District Court found that, except for Western's 1930 increase in prices, Western's profits and prices to the Bell System and to Appellee were reasonable on the basis of Western's average

profit on Bell sales and average earnings from Bell business, considered for the periods 1916 to 1932 and 1923 to 1932 as single units of time; that in view of the general price trends during the years 1931 and 1932, the advance in prices in 1930 should be eliminated from the computations upon which the charge of confiscation is determined for those years (R. III, 2508, 2517). Western's rate of return from Bell business during each of the years 1924 to 1929, inclusive, as determined by the District Court, ranged from 10% to 90% greater than the average period rate of return as found by it.

The District Court's findings of net earnings from Bell business separated from non-Bell business were based on Appellees' presentation thereof. Such presentation separated Western's total operating expenses and manufacturing facilities between Bell and non-Bell sales as separate classes of business on the basis of their respective standard shop cost of sales. Such shop cost forms part of Western's accounting system to measure the efficiency of its manufacturing operations, and comprise assumed labor, material and overhead costs (R. I, 383, 331). Appellee's presentation allocated to Bell business substantially all of Western's Development and Research expense applicable to licensed manufacturers and distributors of Western, who paid Western valuable consideration for the use of its inventions in their fields (R. II, 3654a; R. II, 1628-30).

The District Court failed to deduct from Western's "average investment" as defined by it, five items: (1) the pension fund reserve; (2) notes payable to trustee of pension fund; (3) the amount of working reserves; (4) current liabilities other than payables; and (5) cash not used in the operating end of the business and received from non-operating activities (R. II, 1614-22).

The net earnings shown in Appellee's presentation for the years 1924 to 1929, inclusive, were determined after deducting more than $20,000,000 from current income: (1) to make up the excess of original cost of plant in service in the years 1924 to 1927, inclusive, over their prognosticated reproduction value during the ensuing ten to fifteen years; (2) to make up under-accruals of the years prior to 1923 for its pension fund liability; and (3) to cover depreciation in excess of the yearly amounts allowed by the Internal Revenue Department (R. II, 1622-24; R. VI, 3917).

The District Court found the net earnings from the existing rates for each year of the litigation. Such earnings exceeded Appellee's showing of corresponding recorded earnings by yearly amounts ranging from $445,000 to $1,204,000 (Appendix, p. 119). It found also the net earnings from the attacked rates for each year of the litigation; such earnings were lower than Appellee's showing of corresponding recorded earnings by yearly amounts ranging from $71,000 to $1,294,000 (Appendix, p. 121). The District Court found that "applying the standard prescribed by the Supreme Court" the required rate of return to avoid confiscation, related to rate base as determined by it, for each year of the litigation, was the per cent stated above (*supra*, 8). It found that in the application of such standard "one of the factors to be considered is that of the rates 'generally being made at the same time and in the same general part of the country on investments in other business undertakings, which are attended by corresponding risks and uncertainties.'" It stated that it gave weight to the facts of which courts take judicial notice relative to the general decline in corporate earnings during the years 1931 and 1932; that a public utility enjoying Appellee's advantages was not entitled to the large earnings made by many

undertakings during the periods of great prosperity, and on the other hand its returns in times of adversity should not be reduced to the extent that the earnings of many private corporations have been impaired. It stated that the range in the required minimum rate of return to avoid confiscation as found by it gave weight "to all of the elements which under the ruling of the Supreme Court we are required to consider" (R. III, 2514).

The District Court did not apply to Appellee the "attraction of capital and maintenance of credit" test of compensatory rates set forth in *Bluefield Water Works Improvement Co.* v. *Public Service Commission of Virginia,* 262 U. S. 679 (1923); it applied the "comparative return" test repeated in the *Bluefield* Case from *Willcox* v. *Consolidated Gas Co.,* 212 U. S. 19 (1909), but used therein only the investment experience outside the Bell System. It did not use therein the actual financing and financial experience of Appellee during the period under investigation and the comparable actual financial and financing experience of the other Associated Companies under returns which were not in excess of the net income estimated to be produced by the attacked rates. Nor did it give effect in its test to the special character of the return to Appellee's investors resulting from its findings—on Separation of Revenues, License Contract Services and Payments, Depreciation Expense, and Western's Profits and Prices—which created advantages of additional pecuniary profits as part of the return to such investors which are not received by investors outside the Bell System.

The "Appendix" to this brief is intended to present for convenient reference, various computations and detailed accounts from the record on the 1930 appeal to this Court

(*Smith* v. *Illinois Bell Tel. Co.*, 282 U. S. 133) and designated herein as "O. R.," and also from the present record on appeal.

The present record is necessarily voluminous. It covers the ten years involved, 1923 to 1932, inclusive. The facts in relation to each year differ. In some respects so do the issues.

The evidence required by the directions of this Court involves the examination of the books of account and the activities of many corporations—some of which do a world-wide business. In some instances, allocations of revenues, expenses and property are required in ramified corporate activities. Such allocations require consideration also of practices founded on contracts and relationships that go back half a century to the beginning of the telephone industry.

Further, the District Court's Opinion and Findings of Fact do not reveal in many instances the basis upon which conclusions were reached. This necessitates the employment of some of the material contained in the Appendix, and also a large portion of the record on appeal.

Specification of Errors.

A specification of such of the assigned errors as Appellants urge is that the District Court erred:

1-10 (R. III, 2528-31)	(In allocating to interstate toll business (and to intrastate toll business substan- (tial portions of gross and net revenues (from Chicago intrastate exchange serv- (ice under the existing rates and under (the rates in suit.
22-31 37-160 11-23 32-36 (R. III, 2531-40)	(In allowing as proper operating expenses (amounts to cover a portion of the Amer- (ican Company's expense of Development (and Research, of direct sales to its in- (vestors of new issues of securities and (of servicing its outstanding securities, of (operating ten departments whose opera- (tions are concerned with its function as (a Holding Company investor and of its (appropriation of $30,395,800 to its Re- (serve for Contingencies.
160(a), (b), (c), (e-1), (e-2), (h-1), (h-2), (h-3), (i) (R. III, 2570-74)	(In failing to find and to give effect to (valuable considerations received by the (American Company from Appellee ap- (plicable as additional compensation for (License Contract services.
38-65 (R. III, 2541-9)	(In allowing as proper depreciation ex- (pense charges under the existing rates (and under the attacked rates amounts in (excess of those prescribed by the Com- (mission's Orders of 1920 and 1923, re- (spectively.
40-44 (R. III, 2542-3)	(In failing to find and to give effect to the (fact that had Appellee conformed its de- (preciation expense charges to the allow- (ances by the Commission's 1920 Order, (Appellee's recorded net earnings would

	(have been increased by more than the re- (duction in revenues caused by the at- (tacked telephone rates.
66-123 (R. III, 2549-63)	(In its finding on Western's rate of re- (turn from its Bell business and from its (business with Appellee.
75-83 87 88-91 108-110 114 (R. III, 2553, 2555-7, 2560-1)	(In failing to give effect to the fact that (the separation of Western's total operat- (ing expenses and manufacturing facili- (ties between Bell and non-Bell sales as (separate classes of business was on the (basis of their respective "standard shop (cost of sales" which comprise assumed (labor, material and overhead costs.
66-74, 84-86 (R. III, 2549-52, 2555-6)	(In its findings on Western's "average in- (vestment" and net earnings.
92-107 111-113 115-123a (R. III, 2557-63)	(In its findings on the reasonableness of (Western's earnings on the basis of pe- (riods of years 1916 to 1932, inclusive, (and 1923 to 1932, inclusive, considered as (single units of time, instead of for each (year under investigation.
124-125, 146-148 (R. III, 2563-4, 2568)	(In its findings on fair rate base value.
126-139C (R. III, 2564-6)	(In failing to find and to give effect to the (fact that Appellee's method employed in (its showing on reproduction cost new (could not produce a reproduction cost (new estimate, could not measure the fair (value of the property and was not based (on an honest and intelligent forecast as (to the probable price and wage levels (during a reasonable period in the future.
140-145 (R. III, 2567-8)	(In failing to find and to give effect to the (fact that there should be deducted from (the reproduction cost new estimate of the

(depreciable property the percentage (thereof equal to the percentage which the (amount of Appellee's depreciation re- (serve was of undepreciated book cost of (such property.

149-155
164-168
(R. III, 2568-9, 2576)

(In its findings on the required minimum (return to avoid confiscation and on the (constitutional inadequacy of the attacked (rates.

158-160
171
(R. III, 2570-4, 2577)

(In failing to find and to give effect to the (fact, in its application of the returns on (corporate investments outside the Bell (System to test the inadequacy of Appel- (lee's return from the attacked rates, that (its findings on revenues and expenses (and Western created advantages of addi- (tional pecuniary profit which are not re- (ceived by the ordinary investors outside (the Bell System.

155-157
152-154
161-163
(R. III, 2568-9, 2574-5)

(In failing to give effect to Appellee's ac- (tual financing and financial experience (under the recorded net income produced (by the existing rates, to the effect there- (on estimated to be produced by the at- (tacked rates, and to the comparable ac- (tual financing and financial experience of (the other Associated Companies under (returns not in excess of the net income (estimated to be produced by the attacked (rates.

166
(R. III, 2576)

(In denying Appellants' motion to require (Appellee to make available for inspec- (tion the Minute Books of the Board of (Directors of the American Company.

172
(R. III, 2577)

(In failing to find that at all times since (the effective date of the Order of the Illi- (nois Commerce Commission of August (16, 1923, the telephone rates prescribed in (said Order have been, and they are now,

(constitutionally adequate; that said Or-
(der is valid.

168-170
173-178
(R. III, 2576,
2578)

(In failing to find that Appellee's bill of
(complaint should be dismissed for want
(of equity, and in not ordering the refund
(of the charges collected in excess of those
(prescribed by the Order of August 16,
(1923.

SUMMARY OF ARGUMENT.

Preliminary Statement.

PERIOD 1923-1929, INCLUSIVE.

This Court is asked to review a decree of the District Court which voids state action to reduce existing telephone service charges in Chicago for the benefit of the lowest class of telephone subscribers by more than $2,000,000 per year and aggregating $15,000,000, exclusive of interest, for the seven-year period 1923 to 1929, inclusive. On the District Court's findings, the effect of such reduction would have been merely to reduce by $5,300,000 the $8,700,000 surplus which Appellee showed on its books that it had accumulated during this period from its Chicago Intrastate business under the existing rates in effect since 1920. This surplus remained after making the following payments: all operating expenses, interest and amortization on money borrowed, and an 8% cash dividend on outstanding stock, including therein $31,220,000 capital stock sold to its stockholders at par during this period.

The reduction in gross revenue of more than $2,000,000 per year by the attacked rates, as found by the District Court, would have decreased such *recorded* return under the existing rates by less than $650,000 per year in the period 1923 to 1927, inclusive, and by $1,200,000 in each of the years 1928 and 1929. The difference between such re-

duction in gross revenues and the recorded earnings arises from two considerations. The District Court found that such recorded figures overstated operating expenses by $6,156,712. Such sum is made up from excessive depreciation expense charges and license contract payments disallowed by the District Court. Furthermore, $3,615,931 in franchise and federal income taxes, license contract payments to the American Company, and administrative expenses applicable thereto would not have been paid by Appellee had its gross revenues been reduced by the enjoined rates.

By the "attraction of capital and maintenance of credit" test of compensatory rates of the *Bluefield* Case, and by the "comparative return" test of compensatory rates of the *Willcox* Case, using therein for comparison the actual comparable experience of the other Associated Companies of the Bell System, Appellee's recorded return during each year of this period is clearly compensatory. The reduction thereof of the $5,300,000, as found by the District Court, had the attacked rates been put into effect, could not have caused confiscation. The yield from the recorded return under the existing rates ranged from 9.22% to 11.5% on outstanding capital stock and from 8.10% to 10.03% on corresponding capital and surplus. The yield from the attacked rates, as found by the Court, ranged from 7.43% to 10.07% on outstanding capital stock and from 6.53% to 8.91% on corresponding capital and surplus.

The District Court, without applying either of the above standards, found the attacked rates confiscatory on the basis already stated.

To be compensatory under the standard applied by the District Court, it would have been necessary for Appellee's Chicago intrastate telephone service charges to yield

sufficient to enable it to pay an 8% cash dividend on all outstanding stock and to have carried to surplus over $36,000,000, which amount was only $4,000,000 less than the entire equity investment in the business at the beginning of the litigation. Such yield would represent a yearly rate of return ranging from 15.1% to 20.63% on outstanding capital stock and from 13.2% to 18.9% on corresponding capital and surplus.

The net income available for return under the existing rates, and under the attacked rates as found by the District Court, which produced the above results, were only part of the returns which Appellee's investors received from it. The additional returns are comprised in nine advantages of additional pecuniary profit, received by the American Company as Appellee's equity investor, at Appellee's expense, and confirmed by the District Court's findings on Revenues and Expenses. These additional returns are not received by the ordinary investor in business undertakings outside the Bell System.

Adjusting the District Court's findings to eliminate the undue burden on Appellee of providing such advantages, and to conform the character of the return to Appellee's investors to that received by the ordinary investor outside the Bell System, *i. e.* "net cash income available for return," such adjusted rate of return is clearly compensatory even on the standard applied by the District Court. Such return related to a rate base in excess of capitalization (stock, surplus and funded debt) applicable thereto, ranged from 8.6% to 10.6% during this period.

1930-1931.

The reduction in existing telephone service charges by the attacked rates in 1930 would be $1,870,000 and in 1931,

$1,632,000. However, the reduction in Appellee's recorded return from the existing rates would have been only $892,000 and $229,000, respectively. The difference in each case represents overstated depreciation and maintenance charges disallowed by the District Court in the amounts of $753,000 and $1,204,000, respectively, and savings in taxes and expenses exceeding $200,000 per year through the reduction in income.

The recorded return under the existing rates in 1930 permitted payment of an 8% cash dividend of $6,100,000 on $76,850,000 outstanding capital stock applicable to Chicago Intrastate business, and accumulation of $639,000 to surplus. The return from the attacked rates in 1930, as found by the District Court, would have fallen short by $253,000 of earning such payment. The recorded return under the existing rates in 1931 fell short by $275,000 of earning the 8% cash dividend of $6,963,000 on $87,045,000 outstanding capital stock applicable to Chicago intrastate business, and the attacked rates would have increased the shortage by $229,000. But such yield in each case was after absorbing as operating expense the cost of providing for the American Company, as Appellee's equity investor, the advantages of additional pecuniary profit as recognized by the District Court's findings on Revenues and Expenses, which are not received by investors outside the Bell System. Some of these advantages increase in value to the American Company and in burden on Appellee in periods of depression.

On the basis of the same tests of compensatory rates applied by Appellants to cover the period 1923 to 1929, inclusive, as above stated (*supra*, 22), the recorded return from the existing rates is clearly compensatory in each of the years 1930 and 1931, and the reduction thereof

of $892,000 and $229,000, respectively, as found by the District Court, had the attacked rates been put into effect, could not have caused confiscation. The yield from the recorded return of the existing rates represented for 1930 8.83% on outstanding capital stock and 7.55% on corresponding capital and surplus, and from the attacked rates 7.67% on outstanding capital stock and 6.55% on corresponding capital and surplus. For 1931 the yield from the recorded return of the existing rates represented 7.68% on outstanding capital stock and 6.65% on corresponding capital and surplus, and from the attacked rates 7.42% on outstanding capital stock and 6.42% on corresponding capital and surplus.

On the basis of the same test which it applied for the prior period, as above stated (*supra,* 22), the District Court found the attacked rates confiscatory in 1930 and 1931. To be compensatory on the basis of the District Court's findings, it would have been necessary for Appellee's Chicago Intrastate telephone service charges to yield sufficient to pay an 8% cash dividend in each year on all outstanding capital stock and to have carried to surplus $4,350,000 in 1930, and $2,740,000 in 1931—such yield representing for 1930, 13.6% return on outstanding capital stock and 11.6% on corresponding capital and surplus, and representing for 1931, 11.15% return on outstanding capital stock and 9.65% return on corresponding capital and surplus, respectively.

Adjusting the District Court's findings to eliminate therefrom the undue burden on Appellee of providing the advantages of additional pecuniary profit for the American Company as Appellee's equity investor, such adjusted rate of return from the attacked rates is clearly compensatory even on the standard applied by the District Court.

Such return related to a rate base in excess of capitalization (stock, surplus and funded debt) applicable thereto, ranged from 8.3% to 7.5% during this period.

1932-1933.

The record closed July 1, 1932. No estimate was shown of the reduction in existing telephone service charges by the attacked rates in 1932. The Court found, on the basis of Appellee's estimate in May, 1932, that the reduction in net revenue which would have been caused, had the attacked rates been in effect was $1,270,000, but the estimated recorded return under the existing rates would have been reduced only $71,300. The difference presumably represented excessive depreciation and maintenance expense charges absorbed by the estimated recorded return and disallowed by the District Court. On the basis of the 1931 capitalization, the recorded return under the existing rates and the attacked rates would have yielded 5.6% on outstanding capital stock applicable to Chicago Intrastate business, after absorbing the costs of providing for the American Company as Appellee's equity investor, the advantages of additional pecuniary profit not received by investors outside the Bell System. No other facts appear in the record by which to test the inadequacy of such recorded return or the attacked rates.

But the District Court, upon a finding of rate base value for the entire year and a finding of required minimum return based on judicial notice of returns to the ordinary investor outside the Bell System, found the attacked rates confiscatory for 1932 and at the date of the Opinion April 29, 1933, and the Decree June 28, 1933.

Summary of Points.

ALLOCATION OF CHICAGO INTRASTATE EXCHANGE SERVICE REVENUES TO INTERSTATE TOLL SERVICES (Infra, 49).

Appellee's allocation of exchange service revenues to interstate toll service was made in violation of the direction of this Court on December 1, 1930, that the separation of revenues, expenses and property between intrastate and interstate business should be made on the basis of use.

Such allocation was based on an alleged universal understanding claimed to be in effect from the beginning of the telephone industry that the exchange service company is compensated by the exchange service rates for every use of its exchange plant facilities in the interstate toll services rendered by a different company—such as the American Company—and even though the patrons of the interstate toll service may or may not be subscribers to the exchange service or to any service of the owner of such exchange plant facilities. Appellee assumed but did not prove that such alleged universal understanding had application to its Chicago Exchange. Contrary to this assumption, the fifty years' history of its exchange service ratemaking in Chicago shows that Appellee's attempt in 1893 to cover by its Chicago exchange service rates the interstate uses of its exchange plant facilities, was held illegal by the State Courts as violative of the 1889 Telephone Franchise under which it was operating in Chicago, and which continued in effect to 1907. Such alleged universal understanding is contrary to the provisions of the 1907 and 1913 Telephone Franchises, in effect to 1929. It is contrary to the provisions of the Chicago exchange service rate schedules filed

with the State Commission beginning with 1914 as required by Statute. It is contrary to the representations made by Appellee in its pleadings in various proceedings before the State Commission covering its Chicago exchange service and rates, including the existing and attacked rates herein involved. It is contrary to the Commission's orders entered pursuant thereto. The assumed application of the alleged universal understanding is contrary to Appellee's fifty years' history of contractual relations with the operators of the interstate toll services using its Chicago exchange plant facilities. Such relations between Appellee and the American Company as the operator of the long distance service, are controlled by Section 10 of the Original License Contract of 1881, by which Appellee was granted "the right to a reasonable and suitable division of the tolls and profits" of the American Company's long distance business transacted in Chicago as consideration for the use in that service of Appellee's Chicago exchange plant facilities. This grant was originally given only to Appellee and to two other Associated Companies in the Bell System. The record shows that as late as 1930 such contractual relations covering Chicago differed from those prevailing under the standard agreement between the American Company and the other Associated Companies covering the same subject matter. Relations between Appellee and other operators of connecting company interstate toll services are controlled by contracts whose provisions clearly indicate that Appellee's share of the interstate toll services revenues was intended to cover compensation to it for the use therein of its Chicago exchange plant facilities.

The record shows that such alleged universal understanding was not contained, by express declaration or necessary implication, in any filed rate schedules covering

Chicago exchange service rates. The extension of the scope of such filed rates to cover the unfiled alleged universal understanding violates many provisions of the Illinois Statutes regulating Appellee's operations as a public utility.

Finally Appellee did not prove the existence of any such alleged universal understanding by adequate proof to support a finding of confiscation to void state action.

LICENSE CONTRACT SERVICES AND PAYMENTS.

(Infra, 81).

The argument shows that the District Court should have reduced by amounts ranging from $575,000 to $754,000 per year the license contract payments which it found proper operating expenses, such reductions covering the American Company's expenses applicable to its non-license contract operations, but which expenses Appellee erroneously allocated to License Contract operations.

During the period of the litigation the American Company's operations covered four distinct fields. One was the License Contract operations to provide in part efficient and economical management for the Associated Companies. The second field of operations—Licensing of Inventions—covers the licensing, for valuable consideration, of inventions developed by the American Company's Development and Research Work for use in three separate classes of undertakings. These are: (a) in the motion picture industry and others in non-telephone business throughout the world; (b) in telephone communication equipment manufactured by Western for sale in the Bell System and

to other retail customers and to distributors for resale in this country and abroad; and (c) in telephone communication equipment manufactured by four manufacturers other than Western for sale outside the Bell System in this country and abroad. A third field of operations—Holding Company—covers the American Company's activities as the sole or principal equity investor in and banker of the Associated Companies with whom it has license contract relations, and as the sole or principal equity investor in and banker of Western and of other non-telephone operating corporations. The fourth field of operations—Owner and Operator of the Long Lines—covers its activities as the operator of (a) interstate message communication services between the Associated Companies and outside the Bell System throughout the world; (b) telegraph and teletypewriter services; (c) chain radio broadcasting; (d) transoceanic radio telephone service; (e) radio telephone service to mobile stations; and (f) picture transmission and photo-telegraphy relating to electrical transmission of pictures.

In the regular course of its business the American Company does not allocate its total expenses between the four fields of its operations, or to the revenues received therefrom or from any portion thereof. It does not attempt to limit the license payments which are established as a uniform percentage of gross operating revenues of each Associated Company to cover only the part of its total expenses and reasonable return on investment applicable to its License Contract operations. In lieu of a strict accounting the American Company employs the practice of the Mutual Life Insurance Companies to assure to each Associated Company, and through it to the community served, the full benefit of the contributions of each of them

without discrimination in favor of any other Associated Company or of any of its own non-license contract operations. That part of the yearly license payments which proves not to have been needed inures to the benefit of such Associated Company as a part of the return to the American Company on its investment in their securities and as an aid in financing them. Appellee's presentation, on which the District Court's findings on License Contract were based, did not follow the American Company's practice. It attempted to allocate to License Contract Operations the proper proportion of the American Company's expense in each of its twelve operating departments and in all of its operations covering all four fields of activities. This allocation was made in the face of the admission by Appellee's principal witness therein that as late as 1931 "this matter of separating expenses here, license contract expenses from other expenses, was quite a mystery and the department heads could not tell me very much."

PART I.

The American Company's Expense of Development and Research (Infra, 89).

Appellee's distribution of the American Company's $46,000,000 Development & Research expense between License Contract and other operations of the American Company did not allocate any portion of such expense to the American Company's operations as the Licensor of Inventions other than for use in the field of Western's retail sales of telephone communication equipment. Nor did Appellee offset as a credit against the Development and Research expense properly allocable to such Licensing of Inventions

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operations, any portion of the substantial cash royalties and other values received by the American Company and its subsidiaries from all the other fields covered by them.

The distribution between the Long Lines and the Associated Companies of the portion determined by Appellee applicable to License Contract operations was made on the basis of plant in service. Such basis of distribution gives no effect to the fact that such work covered problems having dissimilar application to and dissimilar results on dissimilar operations of dissimilar plants of the Associated Companies on the one hand, and of the Long Lines on the other hand. Such allocation unduly burdened the Associated Companies for the unjust enrichment of the American Company by an aggregate amount exceeding $20,000,000 during the period of the litigation.

PART II.

The American Company's Expense of Direct Distribution of New Securities and of Servicing Outstanding Securities (Infra, 174).

Appellee allocated to License Contract operations 94% of the $3,000,000 spent by the American Company to raise capital by direct sales of its stocks and bonds to its investors during the period of the litigation without the intervention of bankers, and 94% of the $7,350,000 spent by it to service all of its outstanding securities including such new securities and those issued by it prior to 1923. The servicing expense covers the transfer of stock, handling dividends, paying interest coupons, etc., expense of the character incurred by any large company having securities outstanding in the hands of many investors. Appellee ar-

rived at the 94% figure on the basis that the capital raised by the American Company for investment in the Associated Companies during the period of the litigation and prior thereto represented 94%, and the American Company's capital raised for and used in its investment in non-Associated Companies and activities represented 6% of the total capital raised by and used in the American Company's entire operations.

The entire expense allocated to License Contract operations covering the direct distribution of new securities and of servicing outstanding securities should have been charged to the American Company's Holding Company operations as investor in the securities of the Associated Companies; the investment in and funds required for License Contract operations were negligible, and the use thereof was otherwise compensated. The American Company's Holding Company operations as investor in Appellee neither come within the express provisions of the License Contract nor can they be implied therefrom. As investor in Appellee the American Company is not entitled to reimbursement of expenses for raising funds to increase or to maintain its investment in the stock of Appellee. Such reimbursement, if made, violates the orders of the Illinois Commerce Commission, under which the American Company purchased stock in Appellee.

PART III.

The American Company's Expense of Operating Ten Departments (Infra, 184).

Appellee allocated to License Contract Operations from 90% to 100% of the American Company's entire expenses of conducting ten of its twelve departments, whose opera-

tions are concerned in whole or in part with its functions as a Holding Company. The expense of these departments ranges from $4,389,000 to $7,500,000 per year. Their operations include, among others, the activities of the President, Secretary, Treasurer, Comptroller, Legal Counsel and their respective staffs, the Directors, Committees and others in their relations to all the activities of the American Company. Appellee's allocation was made on the basis as stated by Appellee's witness who made it, that

> "all we had to do as regards that third group" (Holding Company operations) "is to see that our investment is so much, our dividends are so much, and those are the same dividends that anyone else receives. Now the cost of holding those stocks and the cost of the custodianship of them is a pleasure rather than a hardship."

The record shows that the American Company's Holding Company operations involve the investment as of 1923 of $662,529,359 in the stocks of the Associated Companies (R. VI, 4025). This increased to $1,939,270,421 by the end of 1931 (R. VIII, 4424). Corresponding investments in other companies increased from $92,938,687 to $168,855,388 during the same period (R. VI, 4008R, 4027; R. VIII, 4424). It raised $1,166,488,700 (R. VIII, 4373-4, 4425), in new capital and retired $346,468,200 in funded debt (R. V, 3307-18-23-31), during the same period.

No part of the expense of the operations of these departments should have been allocated to License Contract operations. The portion thereof, if any, applicable to License Contract operations is negligible and is otherwise compensated. Neither under the License Contract nor as investor in Appellee is the American Company entitled to reimbursement of its expenses of the character described.

PART IV.

The American Company's $30,395,000 Appropriations to Reserve for Contingencies (Infra, 194).

In 1900 the American Company established a "Reserve for Contingencies." In the years 1924 to 1927, inclusive, it appropriated thereto from earnings $30,395,000. Appellee allocated this entire sum to License Contract operations. The basis of the allocation was the unsupported statement of the American Company's Comptroller (who was neither a director nor a member of the Executive Committee which made the appropriations) that the controlling factor in such appropriations and in similar ones since 1919 was the apprehensions of the directors of the American Company that there might be losses incurred in connection with their patent infringement liability under their license contract obligation to hold the Associated Companies harmless in the use of telephonic appliances embodying inventions recommended by the American Company.

No part of such appropriations is properly allocable to License Contract operations. The obligation to which the appropriations were claimed to have application did not become a part of Appellee's License Contract until September, 1930. Such appropriations, even if supported by adequate proof, as to the purpose thereof, could have no application to the American Company's obligation under Appellee's License Contract in effect from 1919 to 1930 to provide insurance against patent infringement liability as such appropriations lacked the necessary essentials therefor. The witness' unsupported version of these appropriations is contrary to the American Company's appropriations of $43,000,000 from 1900 to 1918 to the same Reserve for Contingencies to provide, as it said in the regular course of its

business "for fluctuations in gross and net revenue caused by varied business conditions." It is contrary to the purpose of the transfers made from that Reserve prior to and during the period of the appropriations from 1919 to 1928. It is contrary to the position on the same subject matter taken by the same witness in the Michigan Telephone litigation in 1929, in the Ohio Telephone litigation in 1931, and in the exhibits furnished to Appellants in the present litigation prior to his testimony therein on this subject matter.

PART V.

Considerations Received by the American Company Applicable as Additional Compensation for License Contract Services Not Considered by the District Court (Infra, 217).

The District Court's findings erroneously give no effect to the four considerations stated above (*supra*, 10), received by the American Company from Appellee in addition to the License Contract payments which are applicable as additional compensation for the License Contract services rendered to Appellee during the period of the litigation.

WESTERN'S PROFITS AND PRICES (Infra, 233).

This Court directed that findings be made of Western's profits from Bell business and from Appellee and of the reasonableness thereof in the light of the different uses made of Western's prices in connection with the estimates upon which the charge of confiscation was predicated for each year of the litigation, as found by the District Court. Such uses cover (a) the substantial purchases made each year

attributable to maintenance and other expense charges; (b) the use of Western's current prices of each year of the litigation as a factor in the index number computations to produce the reproduction cost estimate in the year of revaluation of the telephone plant in service,—on the basis of which estimate the District Court predicated its findings on Rate base value and on Depreciation expense charges for each year of the litigation.

The District Court found—(a) the costs, profits and investment allocable to Bell business separated from that allocable to non-Bell business; (b) the relationship between such costs, profits and investment so determined for Bell business and that for business with Appellee; and (c) the reasonableness of the profits from business with Appellee so determined—in each case on the basis of the permanent continuous relationship of Western and the Bell System throughout the period of the litigation considered as a single unit of time, and throughout that period together with the period prior thereto to 1916 as a single unit of time. Such findings have application, if at all, to justify the use of the composite of Western's prices over the period considered as a single unit of time, but cannot justify the use of only current prices for the particular purposes which Appellee chose to make of them in connection with its estimates upon which its charge of confiscation was predicated and sustained by the District Court.

Appellee's distribution, on the basis of "standard shop costs" of sales, of Western's expenses between the Bell and non-Bell sales of each of the periods 1916 to 1932, inclusive, and 1923 to 1932, inclusive, considered as single units of time, or for each year thereof, is fatally defective. It assumed but did not prove that each class of sales for each period or for each year was a fair and representative

cross-section of the combined sales of each such period of year.

Appellee's separation of Western manufacturing facilities between Bell and non-Bell sales considered as separate classes of business on the basis of their standard shop costs of sales, is fatally defective. It assumed but did not prove that the usage of plant facilities by items and class of products follows shop cost of sales embracing labor, material and overhead, and assumed but did not prove that shop cost of sales and cost of production are synonymous.

Appellee's excuses of expediency and economy for not making a proper separation of Western's operating expenses and manufacturing facilities are of no avail, as its use of Western's profits and prices in its presentation on the issue of Rate Base Value, Depreciation Expense, Maintenance Expense, and Fair Return for each year of the litigation, and the District Court's findings based thereon, are in each case predicated on strict proof of proper separation of each of these years.

Appellee's allocation of Western's Development and Research expense between the Bell and non-Bell business unduly burdened the Bell sales for the unjust enrichment of Western's non-Bell business. No allocation was made of any portion of such expense to the licensed manufacturers, and its distributors who paid Western valuable considerations for the use of its inventions in their fields.

The District Court's finding that Western's rate of return on total Bell sales can fairly be related to its sales to Appellee, has no application to such relationship in any single year, but only over a period of years. Such finding was predicated on the basis that over a period of years Western's sales to Appellee constituted a fair and representative cross-section of Western's sales to all Bell cus-

tomers in the same period, but no such cross-section for any one year was or could be shown or found.

The District Court's finding that it is necessary, in determining the reasonableness of Western's return on Bell business, to take into consideration the reasonableness over a period of years and not merely a single year, precludes the determination of the reasonableness of Western's current prices used in the estimates upon which Appellee's charge of confiscation for each year of the litigation was predicated and sustained.

The standards applied by the District Court to determine the reasonableness of Western's prices and profits did not and could not determine their reasonableness for any one year or over a period of years. The comparison of Western's ratio of sales with that of other manufacturers shows merely the rapidity and turnover of capital and not the reasonableness of the earnings thereon. The comparison of Western's per cent of operating earnings to depreciated and undepreciated investments from Bell business with that of other manufacturers proves nothing. The figures used for such other manufacturers include also non-operating earnings or consolidated holding company operating and non-operating earnings. The method of computing inventory valuations, depreciation expense charges and extraordinary charges and reserves are different from those used by Western.

Western's reduction in prices to its Bell customers during the period 1921 to 1929, inclusive, was established on the basis of prognosticated earning results under the reduced prices, and do not and can not prove that Western's return from its Bell business on such prices before or after each such reduction was reasonable.

The percentage figures related to Western's depreciated and undepreciated "average investment," as defined by it, from Bell business, have no significance whatsoever as a yardstick by which to determine the reasonableness of its earnings therefrom for any year or over a period of years. The failure to deduct from such investment the five items already stated (*supra,* 13) makes such "average investment," before and after depreciation deductions, grossly inflated as the measure of the invested capital on which Western's investors are entitled to a return.

Measured by the sufficiency of Western's net earnings from Bell business as found by the District Court to pay operating expenses, interest and amortization on money borrowed, and to yield a reasonable return on its equity investment (capital and surplus), such net earnings are grossly excessive for each of the years 1924 to 1929, inclusive.

But such excessive return resulting from the District Court's finding of Western's net earnings from Bell business understates by more than $20,000,000 its actual net earnings arrived therefrom during the years 1924 to 1929, inclusive, resulting from Appellee's improper deductions from current income of the three items already stated (*supra,* 14).

The District Court's findings render impossible the determination of the extent to which Western's excessive return enters into the estimates upon which the charge of confiscation for each year of the litigation was sustained. The per cent of net earnings to Bell sales as found by the District Court does not and cannot measure the extent to which the prices used in the findings were excessive. Appellee's method to produce its reproduction estimate ren-

ders impossible of determination the amount of material contained therein to which Western's prices have application.

RATE BASE VALUE (Infra 316).

The Chicago intrastate rate base value as found by the District Court exceeded the corresponding average outstanding capitalization (stock, surplus and funded debt) in every year of the period 1923 to 1931, inclusive. Such excess for the period 1923 to 1929, inclusive, ranged from 52% to 83% of corresponding outstanding capitalization; for the year 1930 was 41% and for the year 1931 was 33% of corresponding outstanding capitalization. Such value exceeded Appellee's entire company average outstanding capitalization in each of the years 1923 to 1927. The Chicago intrastate rate base value was more than the entire company outstanding capitalization in the years 1923 to 1927; was 97% and 92% thereof in 1928 and 1929; was 84% and 77% thereof in 1930 and 1931. But during this period the capitalization applicable to Chicago intrastate business ranged from 58% to 63% of entire company capitalization.

Appellee's method could not possibly produce a reproduction cost estimate of telephone plant, exclusive of overheads, for each year of the litigation. Such estimate assumed that the property was put together historically. On such basis the estimate preserves in its result the higher costs of piecemeal construction and the higher costs of manufacturing material and construction labor which enter into gross additions prior to such improvements. Appellee's estimates proceeded on the basis that during the entire life of the property revalued, prices had been those

current at the date of revaluation and that actual cost, with adjustment in price level by the use of index numbers, would produce the reproduction cost new of such property as of such date. But in its index number computations covering the plant prior to June 30, 1923, Appellee assumed but did not prove that the gross additions each year beginning with 1911 consisted of the identical items and quantities as the selected items and quantities of the 1923 plant accounts which Appellee used in its material index computations. Appellee assumed also but did not prove that the gross additions were constructed each year from 1911 to 1923 by a gang makeup corresponding to the theoretical gang makeup based on the average labor conditions of the entire period 1911 to 1923 considered as a single unit of time.

The District Court's finding that the average of the beginning and end of the year reproduction cost estimate of telephone plant measured the fair value new of the property was inconsistent with its finding on Western's profits and prices.

The reproduction cost new estimate of all physical property for each of the years 1923 to 1929, inclusive, and as adjusted by the District Court for the years subsequent thereto and accepted as fair value, did not make the honest and intelligent forecast as to the probable prices and wage levels during the reasonable period of the immediate future, within the specifications of the *McCardle* Case. Six annual reductions in Western's prices aggregating over 30% of the 1923 prices and foreseeable conditions indicating further cheapening of plant and reduction in prices were disregarded by the District Court.

The theoretical overhead charges included in Appellee's reproduction cost estimate for each year were improperly

determined to form the basis of a valid finding as fair value new. Appellee is not entitled to capitalize overheads which it charged as operating expense under the special conditions of the record. Appellee's method of computing the theoretical overheads unjustly enriched its investors on the amount of their investment added during the period of the litigation. Appellee's inclusion of theoretical overheads in excess of book overheads on the basis that the property will be rebuilt is a repudiation of the basis on which its current price estimates of telephone plant exclusive of overheads were predicated, as already stated.

The method of computing Going Value as found by the District Court unjustly enriched Appellee's investors on the amount of their investment added during the period of the litigation, and was excessive to the extent that the reproduction cost new estimates given effect therein were excessive.

The District Court's findings on fair rate base value should have deducted from the reproduction cost new of the depreciable property each year the percentage thereof equal to the percentage which the amount of Appellee's depreciation reserve was of the undepreciated book cost of such property as of the same date. The use by Appellee of the straight line method of determining depreciation expense charges on property in service involves the principle that it has no right to a return on the amount of property cost which is represented by the balance in the depreciation reserve. Appellee's method of computing the reproduction cost new of its property at any given date requires that effect be given thereto in determining the amount to be deducted from the reproduction cost new of the entire property to reflect the portion thereof on which a finding of rate base value can be predicated. The District Court's

deduction of depreciation was a compromise fiat and has no support in fact or in law.

On the record, no measure appears upon which a valid finding of the fair value of Appellee's property in service can be based other than book cost of Appellee's property. The fair rate base, giving effect to the book cost of Appellee's property, is more than the fair value of the property on which Appellee is entitled to a fair return.

DEPRECIATION EXPENSE CHARGES (Infra, 378).

The District Court, in determining the net income produced by the telephone rates prescribed by the 1920 Order, disregarded the evidentiary value of and the legal consequences to be attached to the 1920 Order on depreciation expense charges as a valid legislative act. Such Commission's Order on depreciation expense charges was made pursuant to the statutory provision in effect in Illinois (which statutory provision exists in fifteen other States), obligating the utility to conform its depreciation charges to the amount fixed by the Commission in the exercise of its power granted under such statute. No attack has ever been made on the 1920 Order. No ground exists to hold void the portion thereof covering depreciation. Had Appellee confined its depreciation expense charges to the allowances made by the 1920 Order, the recorded net earnings would have been increased in each year of the litigation by more than the reduction in revenues caused by the attacked telephone rates. Under such circumstances, Appellee never should have brought the suit, and the District Court upon being advised of the facts should not have entertained it.

The District Court in determining the net income estimated to be produced by the attacked rates prescribed by the 1923 Order, disregarded the fact that when attacked,

the 1923 Order on depreciation expense charges must be treated with the respect to be attached to a legislative act. The District Court made no finding that either the 1920 Order or the 1923 Order on depreciation expense charges was void. It viewed the evidence and made findings thereon as an administrative tribunal substituting for the Commission.

The District Court could not make, in any event, a valid finding of the proper annual depreciation expense allowance on the basis of the classes of evidence to which it claimed it gave consideration. Appellee included in its depreciation expense charges substantial annual contributions from current income, computed on the straight line method, for anticipated depreciation on future additions to such buildings and equipment to be acquired and to be placed in service from time to time to 1974 under the following conditions: (a) where the acquisition and placing of the contemplated future property in the future service is within the sole and uncontrolled discretion and power of Appellee; (b) where no provision whatsoever has been made at the date of such annual contributions to assure that such contemplated future property will in fact be acquired and be placed in the future service; and (c) where no provision has been made at the date of such annual contributions to assure that, to the extent that Appellee does not in fact place in the future service such contemplated future property, it will account to its telephone users for the amount of such annual advance contributions and for the earnings thereon applicable thereto.

Appellee is not constitutionally entitled to receive advance reimbursement for anticipated consumption in service of future properties to be acquired and to be placed therein under the three conditions above stated. Appel-

lee's financial program to provide such contributions makes its telephone customers involuntary investors who provide a large portion of its current capital in service without their right of interest therein. The computations and the claimed grounds of justification of the program in each case are based on and give effect to arbitrary assumptions which Appellee did not and could not prove.

Appellee's recorded depreciation expense charges, made applicable to its reproduction cost estimate, could not form the basis for a valid finding on depreciation expense charges. Appellee's financial program to provide annual advance contributions from income, above stated, precludes the possibility of using the reproduction value of the property in service as a base for the computation of the amount thereof in the manner used by Appellee. Appellee's situation is opposite to that which was before this Court in the *United Railways* Case, and upon which this Court concluded that the reproduction value of the property was the proper base upon which to compute depreciation expense charges, in that: (a) the depreciation expense charges are intended by Appellee to provide a retirement reserve for capital in service and not a reserve for replacement thereof at the date of retirement; (b) the use in the service of long-lived property not to be retired to 1984 precludes the possibility of reaching the same conclusion of fact as that to which this Court attached legal consequences in that case, to-wit: the conclusion of fact that the cost of retired property at the time of replacement "is for all practical purposes present value"; (c) the reproduction cost new estimates which Appellee used in its depreciation expense computations were determined in violation of law as already stated (*supra,* 42) and could not become "the present value" of the property for such use as required by the *United Railways* Case.

The experience of the Associated Companies could not become the basis for a valid finding on depreciation expense charges for the same reason that Appellee's recorded charges could not so become, as already stated. The depreciation allowances by the 1920 Order and by the 1923 Order on depreciation expense charges, made applicable to the reproduction cost new of Appellee's property, could not become the basis for a valid finding on depreciation expense charges for the same reasons that Appellee's recorded charges so made applicable could not so become, as already stated. On the basis of the District Court's findings on depreciation expense charges it is impossible to determine the extent to which they are based on any one or more of the above four classes of evidence.

FAIR RETURN (Infra, 449).

The District Court's use of the investment experience outside the Bell System in its application to Appellee of the "comparative return" test of compensatory rates of the *Willcox* Case, was fatally defective. Unsupported general statements or judicial notice covering post-war returns on corporate investments outside the Bell System should not be accepted as adequate proof to support a finding of confiscation which voids State action. The use of the average cost of money to other business undertakings outside the Bell System as a basis of actual or probable cost to Appellee of credit money, must be predicated upon the knowledge and experience of a very small group of companies in other industries. The determination of the cost of Appellee for money raised through the issue of stock cannot be based upon general percentage figure statements, which take no account of the varying experience of corporate stock financing during the period under investigation.

What rate of return related to a given rate base will produce sufficient income so that "there should still remain something to pass to the surplus account" requires detailed knowledge of the corporate structure of the company to which such rate of return has application; no uniformity in respect to such corporate structures existed during the period of the litigation.

No showing was made that any existing or new utility was or could be financed in the manner assumed by the District Court's findings, which capitalized every dollar of net book investment, including surplus, plus the unrecorded values due to going value and to revaluation on the basis of the reproduction value thereof.

The District Court's application of the returns on corporate investments outside the Bell System to test the inadequacy of Appellee's return to its investors from the attacked rates, disregards the special character of the return to them resulting from the District Court's findings on Separation of Revenues, Licenses, Contract Payments, Depreciation Expense, and Western, which created advantages of additional pecuniary profit as part of the return to such investor which are not received by investors outside the Bell System.

Adjusting the District Court's findings to eliminate the undue burden on Appellee of providing such advantages, and to conform the character of the return received by Appellee's investors to that received by the ordinary investor outside of the Bell System, such adjusted return ranges from 8.7% to 10.6% for the period 1923 to 1927, inclusive, from 8.3% to 9.5% for the period 1928 to 1930, inclusive, and 7.5% for the year 1931. Such returns are clearly compensatory, even on the standard applied by the District Court.

Discussion of Specific Points of Brief and Errors of District Court.

ALLOCATION OF CHICAGO INTRASTATE EXCHANGE SERVICE REVENUES TO INTERSTATE TOLL SERVICES.

PRELIMINARY STATEMENT.

What the District Court Did.

The District Court, without discussion,* adopted in all applicable findings Appellee's allocations of its revenues, expenses and property between the interstate and intrastate services and between the intrastate exchange and the intrastate toll service. To the allocation of revenues Appellants raised objections at the hearings (R. I, 273-4) and on appeal (R. III, 2528-31).

Appellee allocated a portion of the Chicago exchange property and expenses to interstate toll business on the basis of use. To such a basis of allocation Appellants raised and now raise no objection. But Appellee went farther. It allocated to interstate toll business the following substantial amounts of Chicago exchange service revenues which it determined were applicable to cover compensation to it for all interstate uses of its Chicago exchange plant facilities by all persons, subscribers and non-subsubscribers of its Chicago exchange service (R. VII, 4342-43, 4354a):

*The District Court discussed the allocation of property and expenses, as to which there was no issue at the hearings (R. III, 2503-4).

	Under Present Rates		Under Rates in Suit
	Gross	Net	Net
1923	$356,041	$260,614	$245,042
1924	383,633	278,223	262,398
1925	453,006	327,430	309,505
1926	460,104	335,599	317,915
1927	509,369	373,025	354,372
1928	588,491	448,464	427,655
1929	650,247	508,729	486,875
1930	648,613	492,965	472,469
1931	601,189	448,700	431,580
1932	Not Available		

Appellee endeavors to justify its position on the following basis:

(1) The scope of Appellee's filed Chicago exchange service rates—as covering compensation to Appellee for measured use of its Chicago plant facilities in the local service within the city limits by subscribers to that service—is extended by an unfiled universal understanding that such rates compensate Appellee also for every interstate use of the same facilities by non-subscribers and by subscribers of its Chicago Exchange Service (R. I, 274, 275, 297, 301).

(2) Therefore Appellee's Chicago exchange service rates have actually been fixed to compensate Appellee for every interstate use of its Chicago exchange plant facilities.

(3) Therefore Appellee properly allocated to interstate toll business the portion of the Chicago exchange service revenues determined by it to cover its compensation for every interstate use of its Chicago exchange plant facilities, as directed by this Court on December 1, 1930 in this case.

SUMMARY STATEMENT OF APPELLANTS' CONTENTIONS.

I. Appellee's allocation of a portion of the Chicago exchange service revenues to interstate toll business violated the Direction of this Court of December 1, 1930, in this case.

II. Appellee's claim that its Chicago exchange service rates compensate it for every interstate use of its Chicago exchange plant facilities produces fantastic results.

III. Appellee's allocation assumes but does not prove that an alleged universal understanding to the effect that its Chicago exchange service rates compensate the exchange service operator for every interstate use of its exchange plant facilities has application to Chicago.

A. Appellee's claim disregards its fifty years' history of exchange service rate making.

B. Appellee's claim disregards its fifty years' history of its contractual relations with the operators of the interstate toll services.

IV. The extension of the scope of the filed Chicago exchange service rates to cover an unfiled alleged universal understanding that such rates compensate Appellee for every interstate use of its Chicago exchange plant facilities, violates the provisions of the Illinois Statutes regulating Appellee's operations as a public utility.

V. Appellee did not prove the existence of universal understanding that exchange service rates compensate the exchange service operator for every interstate use of its exchange plant facilities.

A. Appellee failed to prove the existence of a universal understanding covering interstate uses by non-subscribers of the exchange service.

B. Appellee failed to prove the existence of a universal understanding covering the interstate uses by subscribers of the exchange service.

DISCUSSION AS TO CONTENTION NUMBERED I.

I.

APPELLEE'S ALLOCATION OF A PORTION OF THE CHICAGO EXCHANGE SERVICE REVENUES TO INTERSTATE TOLL BUSINESS VIOLATED THE DIRECTION OF THIS COURT OF DECEMBER 1, 1930, IN THIS CASE.

This Court, in its Opinion of December 1, 1930, said:

> "It appears that the property of the Chicago Company is used to render (1) what is called exchange service, all of which is intrastate, (2) intrastate toll service over its own lines and under arrangements with companies other than the American Company, (3) interstate toll service, which includes all the toll service rendered under arrangements with the American Company."* (282 U. S. 133, 146-7.)

This Court pointed out that Appellee had allocated its exchange plant facilities entirely to intrastate business, which allocation was adopted by the District Court as a matter of convenience; that Appellants disputed this allocation on the ground that the exchange plant facilities were used in the interstate long distance service of the American Company for which use the American Company had not

*An identical finding was made by the District Court in its Opinion of January 31, 1930 (O.R. I, 84).

compensated Appellee; that Appellants contended the result would be affected either by eliminating from the intrastate business the value of the property and expenses in fact used in the long distance service or by adding to Appellee's intrastate business proper compensation from the long distance business.

This Court also pointed out that the District Court disposed of Appellants' contentions by examining the compensation paid by the American Company for the use in its long distance service of Appellee's facilities in Chicago, including the exchange plant facilities, instead of by allocating to interstate business the value of the exchange plant facilities used and the expenses incurred in connection with long distance service.

This Court held that the proper method of disposing of Appellants' contentions was to make the allocation to interstate business, and said:

> "It is obvious that unless an apportionment is made, the intrastate service to which the exchange property is allocated will bear an undue burden—to what extent is a matter of controversy" (282 U. S. 133, 151).

In a footnote to this last sentence this Court said:

> "In *Houston* v. *Southwestern Bell Telephone Co.*, 259 U. S. 318, 322, relating to the ordinance of the City of Houston prescribing telephone rates for the Company which operated not only the Houston local exchange but also long distance toll lines connecting the local exchange with various towns and cities in Texas and several other States, the Company in practice and for the purpose of the suit, 'credited the local exchange with 25% of the long distance toll revenues received from calls originating in Houston as compensation for the use made of the local plant in rendering long distance service,' and upon the facts there shown the Court held that the allowance was reasonably sufficient" (282 U. S. 133, 151).

This Court held also that, assuming the District Court's method of disposing of Appellants' contentions was proper, it had used a wrong basis of computation and an improper standard in determining the reasonableness of the American Company's compensation to Appellee.

Appellants' interpretation is that this Court's review of the above issue was predicated on the fact that Appellee's intrastate business had not compensated it for the interstate uses of its Chicago exchange plant facilities. Appellee's allocation to interstate business, in the 1932 hearings, of a portion of the revenues from its intrastate exchange business as compensation to it for the interstate uses of its exchange plant facilities was, as Appellants view it, a contradiction of this Court's views. Such allocation produces the identical effect of undue burden on the Chicago exchange service rates that was produced by Appellee's failure at the 1929 hearings to allocate to the interstate toll service the portions of the exchange plant facilities in fact used in such toll service for which Appellee had not been compensated by or through such toll service.

DISCUSSION AS TO CONTENTION NUMBERED II.

II.

APPELLEE'S CLAIM THAT ITS CHICAGO EXCHANGE SERVICE RATES COMPENSATE IT FOR EVERY INTERSTATE USE OF ITS CHICAGO EXCHANGE PLANT FACILITIES PRODUCES FANTASTIC RESULTS.

The consideration that Appellee's position, adopted by the District Court, produces fantastic results, if it does not condemn it, at least should require that such claim be sup-

ported by clear and convincing proof and be in accordance with established legal principles (*Missouri Rate Cases,* 230 U. S. 474, at 501, 507, (1913)).

Appellee's Claim.

As the basis for its allocation Appellee claims:

A. This Court, in its Opinion of December 1, 1930, and the District Court, in its Opinion of 1930, were each wrong in finding

> "It appears that the property of the Chicago Company is used to render (1) what is called exchange service, all of which is intrastate, (2) intrastate toll service over its own lines and under arrangements with companies other than the American Company, (3) interstate toll service, which includes all the toll service rendered under arrangements with the American Company" (282 U. S. 133, 146-7).*

According to Appellee, its "exchange service" not only covers "service between telephone stations within the same local service area" as defined above, which is intrastate, but also includes (a) a portion of the intrastate toll service "between telephone stations located in different local service areas in the same state," and a portion of the interstate toll service "between telephone stations located in different local service areas in different states,"—such portion in each case being from the subscriber's or public

*In New York Tel. Co. v. Prendergast, 36 Fed. (2nd) 54, the Statutory Court held:

"It thus furnishes both intra-state and inter-state toll service. Telephone exchange service is service between telephone stations within the same local service area and the plaintiff's exchange service in the state is an intrastate service. Telephone toll service is between telephone stations located in different local service areas. The state is divided into a number of local service areas. The telephone exchange service and the intrastate toll service together constituting the whole of the plaintiff's telephone service between points within the State of New York."

To the same effect, see Board of Utility Comrs. v. New York Tel. Co. 271 U. S. 23, at 26 (1926).

pay station to the toll board. Appellee claims also that the rates for "exchange service" always did and now do compensate it not only for these three distinct uses of its Chicago exchange plant facilities by the *subscribers thereto* but also for every use of the same facilities in the interstate toll services *by non-subscribers of any of its services or by non-subscribers of its Chicago exchange service* (*infra*, 75).

Appellee's claim not only places part of *the interstate* services within the jurisdiction of *state governmental authority** but leads also to fantastic results which are illustrated by the following examples:

EXAMPLE I.

A French merchant arrives in Chicago on his way to visit relatives in San Francisco. Finding that time will not permit his journey West, he calls San Francisco from a public pay station in Chicago and engages in a long distance telephone conversation which runs a full hour. According to Appellee's view, the American Company's charge to that merchant for the long distance call collected by Appellee does not cover compensation for his use of its Chicago exchange plant facilities for the hour of his conversation; such compensation is not paid to Appellee by the American Company or by the merchant, but is paid to Appellee by Appellee's own subscribers to the Chicago exchange service whose rates were intended to and did cover compensation to Appellee for such use. Similarly, if the same merchant went to a public pay station to receive a long distance communication from his relatives in San Francisco, which ran for another hour, Appellee in its view would be compensated by its Chi-

*The result of Appellee's claim in respect to the intrastate toll service is shown in the Appendix (Appendix, p. 124).

cago exchange service rates for the use of its Chicago exchange plant facilities for the full hour of his conversation.

EXAMPLE II.

The Western distributor of a high priced automobile who lives in one of the suburbs of Chicago, maintains an office in the down town business district of Chicago to transact his out of town business. In his office he has installed the Chicago individual measured business exchange service at a cost of $4 per month. This service entitles him without extra charge to a minimum number of eighty local calls in Chicago and to additional local calls at a graduated cost per call (O.R. IV, 1308). He uses up the minimum number of local calls to which he is entitled each month, but no more. He, however,

(a) originates and receives long distance communications over the Chicago exchange plant facilities and the American Company's lines, to and from the automobile factory in Detroit; and

(b) originates and receives long distance communications to and from his agents in Missouri, Iowa and Kansas—all of which communications aggregate a full period of four hours each day of the week, except Sunday.

According to Appellee's view, the American Company's long distance charges to the distributor do not cover compensation for such four hours' use in the long distance service of Appellee's Chicago exchange plant facilities; such compensation is not paid to it by the American Company or by the distributor as part of the charge for the long distance call, but is paid by Appellee's own subscribers to its Chicago exchange service whose rates were intended to and did cover compensation to Appellee for

such use; only to the extent that such distributor is a subscriber of the Chicago exchange service does he bear any portion of such compensation.

Example III.

The distributor in the second Example (*supra,* 57) calls the office number of his agent in Kansas City, Missouri, at nine forenoon and the report is returned that no one answers the call. Similar report is repeated to the subscriber by the operator each hour to 5 P. M. At that time the distributor cancels the call. According to Appellee, the American Company's revenues from its other customers in the long distance service provide compensation to it for the use of the American Company's facilities in making the report for which the distributor is not charged; but Appellee's revenues from its own Chicago exchange service rates provide compensation to Appellee for the use of its Chicago exchange plant facilities in making such report.

Example IV.

An outstanding feature of the period beginning with 1923, has been the rapid growth in the Bell System of the long distance business and the comparatively more rapid growth of the long haul long distance business of the American Company.

During the period 1923 to 1928, inclusive, the interstate long distance business in Chicago increased 62½% and for the period 1923 to 1930, inclusive, increased 99%; after giving effect to the increase in number of stations the interstate long distance business increased in Chicago during the period 1923 to 1928, inclusive, 17%, and increased by

1930, 33%. But the New York-Chicago long distance telephone business increased during the period 1923 to 1928, inclusive, 194% and the transcontinental business between New York and Chicago, on one end, and Los Angeles and San Francisco, on the other end, increased 430% during this period (R. V, 3162). This increase in long distance business is in striking contrast to the decrease of 8% in the number of Chicago local exchange calls per station from 1923 to 1928, inclusive, and to the decrease of 12% in such number of calls per station from 1923 to 1930 (R. IV, 2700-3).

According to Appellee's method of allocation of exchange service revenues, the greater the growth of the long distance service, the greater the use of Appellee's Chicago exchange plant facilities in such service, the greater the contribution to long distance service by Chicago exchange service rates the smaller the portion of the Chicago exchange service revenues remaining to cover operating expenses and provide a return on investment applicable to the Chicago exchange service from which the rates were originally collected by Appellee.

The mere statement of these fantastic results of Appellee's position adopted by the District Court jars one's sense of fairness!

DISCUSSION AS TO CONTENTION NUMBERED III.

III.

APPELLEE'S ALLOCATION ASSUMES BUT DOES NOT PROVE THAT AN ALLEGED UNIVERSAL UNDERSTANDING TO THE EFFECT THAT ITS CHICAGO EXCHANGE SERVICE RATES COMPENSATE THE EXCHANGE SERVICE OPERATOR FOR EVERY INTERSTATE USE OF ITS EXCHANGE PLANT FACILITIES HAS APPLICATION TO CHICAGO.

A.

Appellee's claim disregards its fifty years' history of exchange service rate-making.

Appellee offered no proof that the alleged universal understanding had application to Chicago. It merely so assumed. Such assumption substitutes an imaginary history for its own history of exchange service rate-making in Chicago.

The Chicago exchange service rates in effect during the period of this litigation were those fixed by the Public Utilities Commission's final Order of December 1, 1920 (O.R. I, 5), in Case 9291 which was commenced by Appellee's petition on July 16, 1919 (R. VIII, 4814a), asking authority to modify certain rates established by its 1907 and 1913 Telephone Franchises of the City of Chicago as contained in rate schedules filed with the Public Utilities Commission on January 27, 1914. The 1907 Telephone Franchise established certain new exchange service rates and

modified other existing exchange service rates established under Appellee's 1889 Telephone Franchise from the City of Chicago, as construed in the case of *Chicago Telephone Company* v. *Illinois Mfg. Assn.*, 106 Ill. App. 54 (1903). The 1889 Telephone Franchise covered exchange service rates then in effect which appellee had established under its Original License Contract of 1881 from the American Bell (O.R. VI, 1925). The Original License Contract of 1881 granted to Appellee the license to use telephone instruments, among others, in the "exchange service," as defined in the Western Union Contract of 1879 (O.R. VI, 1932).

As this history of rate making comes from many documents, a narrative statement thereof is presented in the Appendix hereto, pages 1-26. It shows

Period 1881-1889.

(1) Appellee's Chicago exchange service established pursuant to its Original License Contract of 1881 was not intended to cover the use by the *subscribers* to that service of the Chicago exchange plant facilities in interstate toll service;

(2) Appellee's Chicago exchange service rates were not intended to compensate Appellee for any interstate toll uses of its Chicago exchange plant facilities by *subscribers* or by *non-subscribers* of its Chicago exchange service;

(3) By Section 10 of the Original License Contract of 1881, Appellee was given the right to a "reasonable and suitable division" of the receipts and profits of interstate toll services in Chicago for all interstate toll uses of its Chicago exchange plant facilities, if and when interstate toll services were established by the American Bell, predecessor to the American Company.

(4) No interstate toll services had been established to 1889 making use of the Chicago exchange plant facilities.

Period 1889-1906.

(5) Appellee in 1889 accepted a twenty-year franchise from the City of Chicago which prohibited Appellee from increasing the rates for Chicago exchange service then in effect.

(6) In 1893 the American Company, licensee of the American Bell in the long distance service, extended its lines to Chicago to connect with the Chicago exchange plant facilities for the purpose of offering an interstate toll service making use of such facilities pursuant to Section 10 of the Original License Contract of 1881.

(7) Appellee attempted to expand the Chicago exchange service by including therein the unlimited use by its *own subscribers* of the Chicago exchange plant facilities for the purpose of transmitting or receiving messages in the interstate toll service of the American Company and to increase the Chicago exchange service flat rate of $125 per year to cover compensation to Appellee for such unlimited uses. But Appellee was enjoined, the Court holding that Appellee's action violated the provisions of the 1889 Franchise (*Chicago Tel. Co.* v. *Illinois Mfg. Assn.*, 106 Ill. App. 54).

Period 1907-1914.

(8) A new telephone franchise was put into effect in Chicago in 1907 and modified in 1913, establishing classifications of unlimited and measured Chicago exchange service and rates. But nowhere in such franchises is there any provision—(a) by which subscribers or non-subscribers of Appellee's Chicago exchange service were given the right,

without additional charge, to the unlimited use of the Chicago exchange plant facilities to transmit or to receive interstate toll messages over the wires of the American Company or of connecting companies; (b) by which it was intended that Appellee should be compensated through the Chicago exchange service rates for every use of the Chicago exchange plant facilities in interstate toll service.

(9) By the 1907 Telephone Franchise, in effect to 1929, Appellee was prohibited from entering into any contract with any other company in respect to the Chicago exchange service rates to be charged in Chicago.

Period 1914-1933.

(10) By Section 33 of the Public Utilities Act, in effect January 1, 1914, Appellee was required to file, as of that date, schedules showing all services and charges and classifications for every service performed by it. Pursuant to the above provisions, Appellee filed with the Public Utilities Commission on January 27, 1914, its schedules of Chicago exchange service rates in force July 1, 1913, as fixed by the 1907 and 1913 Telephone Franchises. Included as part of said Chicago exchange rate schedules it also filed a sheet entitled "Regulations." As a part thereof appears the following paragraphs:

> "*Exchange Service (City or Neighborhood)*—Subscribers to Chicago Exchange System service may, on the terms of their contracts, transmit local messages to all exchange telephones located within the limits of the City of Chicago. Subscribers to Neighborhood Exchange service may transmit local messages to all exchange telephones within the limits of the Neighborhood Exchange in which their telephones are located.
>
> A local message is a communication not exceeding five minutes' duration between subscribers' stations

within the same exchange limits. By ordinance of the City of Chicago and these regulations the subscriber, the Company and its lessees and patrons, are forbidden to charge any person more than five cents for a single conversation or message transmitted to any point within the City of Chicago from any telephone furnished under the contract of which these regulations are a part. The use of classes of service is restricted by said ordinance and these regulations as follows:

Flat rate business service is furnished for the use of subscribers and their employees only in their business.

Flat rate residence service is furnished for the use of subscribers and their families only at their residence.

Measured service is furnished for business use of subscribers and their employes only in their business or for residence use of subscribers and their families only at their residence and for the use of any extra name users on the same premises as may be contracted for by the subscribers.

Nickel coin box service business or residence is for the use of subscribers (and others permitted by the subscribers) upon depositing proper coins" (Appendix, p. 10).

Appellants call attention to the fact that Appellee added the definition of *local message* above quoted, which does not appear in the 1907 and 1913 Telephone Franchises (Appendix, pp. 6, 9). The definition contains two important elements—one the limitation of the communication to "subscribers' stations within the same exchange limits," and, second, the limitation in duration of time of a local message. The first shows Appellee's own conclusion that the service to be covered by the exchange service rates was confined to the transmission of communications within the limits of the City of Chicago; the second shows that Appellee went even

beyond the Ordinance in establishing measured use as the basis for charging. Appellee's policy in this respect is entirely inconsistent with any inferred policy to require the exchange service rates to compensate Appellee for the interstate toll uses of the Chicago exchange plant facilities under conditions where such uses may be unlimited in number of messages and in duration of time per message and may be made by non-subscribers of any of Appellee's services or of its Chicago exchange service.

(11) All the Chicago exchange service rate schedules filed from 1914 to date, including those under which Appellee collected the Chicago exchange service revenues allocated to interstate toll services, contain the same definition and scope of Chicago exchange service rates as was contained in the original schedule filed in 1914.

(12) Appellee's petition filed in 1919, in the proceedings in which the Commission's Order of December 20, 1920, was issued establishing the existing Chicago exchange service rates, the language of that Order and the language of the Commission's Order of August 16, 1923, now under investigation, all clearly show that they were dealing with the Chicago exchange service defined and described in the original schedule filed in 1914 (*supra*, 63) and the rates therefor.

B.

Appellee's claim disregards its fifty years' history of its contractual relations with the operators of the interstate toll services.

LONG DISTANCE ARRANGEMENT.

Appellee's assumption that any universal understanding covering the interstate uses of exchange plant facili-

ties has application to Chicago substitutes an imaginary history for its own history of contractual relations with the operators of the interstate toll service. As this history comes from many documents, a narrative statement thereof is presented in the Appendix hereto, pages 27-37. It shows:

(1) In 1881 the American Bell and the Western Union licensee operating in Chicago joined to transfer their business to Appellee to be organized and operated under an American Bell license contract issued in the same year. By this contract, Appellee was granted a perpetual exclusive license to do a local exchange area, local toll, and connecting company telephone business in seven counties in Illinois and in two counties in Indiana. By the same contract the American Bell was given an option to use in extraterritorial business such of Appellee's facilities as were necessary, by paying therefor a "reasonable and suitable division of the tolls and profits" of such extraterritorial business. Such a right of participation was contained in the contracts of only two other licensees—one operating in New York City, and the other in San Francisco (R. VIII, 4925-31). The compensation to all other licensees was fixed, by a standard form contract, on a per message basis, which limited its maximum amount irrespective of the cost to them of furnishing their exchange plant facilities or of the profits of the extraterritorial business from the use of such facilities.

(2) After the extension of the American Company's long distance service to Chicago in 1893, it and Appellee, from time to time, to February 1, 1919, established and readjusted, according to the standard of Section 10 of the Original License Contract of 1881, compensation to Appellee for the use in such service of the various parts of

Appellee's necessary facilities, including therein the compensation for the use of its Chicago exchange plant facilities (1891 Contract; 1896 Modification; 1899 Modification; 1911 Toll Trunk Arrangement; 1911 Long Lines plant arrangement) (O.R. VI, 1934, 1971, 1972).

(3) In December, 1917, the standard arrangement between the American Company and its licensees in respect to compensation for the use of the latter's exchange plant facilities in the American Company's long distance service, already described, was still recognized by the American Company and by Appellee as not to be applicable "in the City of Chicago because of the special conditions which obtain here" (O.R. VI, 1974, 1973).

(4) No contract between the parties prior to February 1, 1919, required that Appellee include as part of the rates for its own Chicago exchange service compensation to it for the use in the American Company's long distance service by the American Company, or by the latter's customers (whether subscribers or non-subscribers of the Chicago exchange service), of the Chicago exchange plant facilities. Nor did any contract create a right in the American Company and/or in its customers to use, free of charge, in the long distance service, the Chicago exchange plant facilities.

(5) Beginning with 1917 the American Company started to revise the License Contract with its licensees. Appellee's revised contract labeled "Memorandum" was prepared by the Legal Department of the American Company (O.R. V, 1602) and was in the new standard form of contract. It was executed in November, 1918, effective February 1, 1919 and recited that it was merely "restating and reaffirming contractual relations." This Memorandum provided that Appellee was

not to make any charge to the American Company or to the latter's customers for its or their use of the Appellee's exchange plant facilities in transmitting or in receiving communications from or to Appellee's exchanges over the American Company's wires, whether or not such customers were subscribers to any of Appellee's own services —for all of which use Appellee was "compensated by its rates for exchange service." The 1930 license contract which superseded the 1919 Memorandum contained the same requirement in respect to Appellee's not receiving compensation from the American Company and/or its customers for the use in the long distance service of Appellee's exchange service facilities, and contained the same recital that for such use Appellee was "compensated by its rates for exchange service." But accompanying the execution of the 1930 contract was an exchange of letters between the parties that: "The provisions of the license agreement do not apply to the division of tolls and originating commissions for the Chicago area" (R. V, 2998-9).

The 1919 and 1930 contracts were executed without the consent and approval of the Illinois Commerce Commission and were not filed with it before or after their respective effective dates. Nor has Appellee before or after 1919 to date filed and published any schedule showing the right of the American Company and of its customers who are non-customers of Appellee and of the customers of Appellee who are not customers of the exchange service, to use, free of charge, in the long distance service, the exchange plant facilities (O.R. V, 1785). Nor has it filed and published any schedule showing that the right to use in the long distance service the Chicago exchange plant facilities was a part of the services covered by the various filed Chicago local exchange rates (O.R. V, 1785).

Appellee's settlements with the American Company have been on the basis of the arrangement specified in the 1919 Memorandum and 1930 contract.

From Appellee's exchange service rate-making history (*supra*, 60), it is clear that the recital in the 1919 Memorandum and in the 1930 contract that for the uses in the long distance telephone service Appellee "was compensated by its rates for exchange service" could have no application to Chicago, whatever may have been its application in the other portions of Appellee's territory.

In the light of Appellee's special situation in Chicago, the arrangement provided for in the 1919 Memorandum and 1930 Contract covering the use by the American Company and its customers in the long distance service of the Chicago exchange plant facilities can be reconciled and be effective only on the following theory: that instead of including compensation for the use in the long distance service of its Chicago exchange plant facilities in its accounting with the American Company under Section 10 of the Original License Contract of 1881 "for a reasonable and suitable division of the tolls and profits" of the long distance business transacted in Chicago, Appellee will take credit for such use as part of its return to the American Company investor on the latter's investment in Appellee's Chicago intrastate exchange service. Such construction is in conformity with the American Company's Mutual Plan of Operation of the Bell System, made effective in 1918 through the 1919 Memorandum in respect to Appellee's License Contract payment to the American Company (*infra*, 82). Such an arrangement between Appellee and the American Company as its investor is purely an accounting arrangement and is an act of management; Appellants' complaint in re-

spect thereto is only that Appellee's allocation, followed by the District Court, preserved for the American Company the benefit thereof, but Appellee's presentation and the District Court's findings on License Contract Services and Payments and Fair Return (*infra,* 83, 450) failed to preserve for Appellee the reciprocal benefit under the accounting arrangement to which it was entitled.

Appellee, however, construes the 1919 Memorandum and 1930 Contract covering long distance service as affirmations of a rate-making practice in effect in Chicago. By so doing Appellee's Chicago intrastate business is burdened for the benefit of the American Company as operator of the Long Distance service but the American Company as the investor in Appellee's business still retains the right to a *fair return* measured by the standard for the ordinary investor in the ordinary public utility bearing the ordinary relation to its investors. This conversion of the accounting arrangement into an alleged rate-making practice has no factual support (*supra,* 63), and violates the Illinois Statutes relating to Appellee's operations as a public utility in the respects to be considered hereafter (*infra,* 72 *et seq.*).

CONNECTING COMPANY ARRANGEMENTS.

Wisconsin Telephone Company.

By agreement between Appellee and the Wisconsin Telephone Company in effect prior to 1910 Appellee received no originating commission, but received 80% of all revenues of interconnecting business originating in or received by it (O.R. IV, 1334). Beginning with 1910 each company received an originating commission on the basis of a percentage of the toll charge; the distribution of the balance was on a basis agreed upon.

Nothing appears in the record to indicate that the use of the exchange plant facilities was not intended to be covered either by the connecting company rates or in the settlement between the parties (O.R. IV, 1328).

Indiana Bell Telephone Company, Central Union Telephone Company and Southwestern Bell Telephone Company.

Appellee from time to time had connecting company agreements with the Central Union Telephone Company, the Indiana Bell Telephone Company and the Southwestern Bell Telephone Company. In each case the settlement with Appellee provided for an originating commission. In no case was there anything to indicate that the use of the exchange plant facilities was not intended to be covered either by the connecting company rates or by the settlement between the parties (O.R. IV, 1328, 1337, 1341).

These agreements were in conformity with the general practice in the United States (*Smith* v. *Illinois Bell Tel. Co.*, 282 U. S. 133; *Houston* Case, 259 U. S. 318; *Southern Bell Tel. & Tel. Co.* v. *Railroad Commission of Georgia*, 274 Fed. 438, certiorari denied 262 U. S. 761; *Pacific Tel. & Tel. Co.* v. *Whitcomb*, 12 Fed. (2d) 279).

DISCUSSION AS TO CONTENTION NUMBERED IV.

IV.

THE EXTENSION OF THE SCOPE OF THE FILED CHICAGO EXCHANGE SERVICE RATES TO COVER AN UNFILED ALLEGED UNIVERSAL UNDERSTANDING THAT SUCH RATES COMPENSATE APPELLEE FOR EVERY INTERSTATE USE OF ITS CHICAGO EXCHANGE PLANT FACILITIES VIOLATES THE PROVISIONS OF THE ILLINOIS STATUTES REGULATNG APPELLEE'S OPERATIONS AS A PUBLIC UTILITY.

The extension of the scope of the filed exchange service and rates by an unfiled alleged universal understanding covering such service and rates involves the violation of many sections of the Illinois Statutes regulating public utilities in effect since 1914. Similar violation would be caused if any contention is made that the 1919 Memorandum did not *affirm* but provided for the rate-making practice that "for such (long distance) use," the Appellee "was compensated by its rates for exchange service" (*supra*, 68). Such sections are:*

Section 33.

This section requires that every public utility file with the Commission, print, and keep open on inspection, schedules showing all rates and other charges for any service performed by it. As part of such schedules there must be filed

*The Illinois Statute from which these sections are quoted appears in the Appendix (p. 38-45).

"all rules, regulations, * * * privileges and contracts that in any manner affect the rates charged or to be charged for any service" (Appendix, pp. 38-39).

The form of the schedules to be filed and posted is prescribed in Section 34 of the Act (Appendix, pp. 39-40).

Section 35.

By this section a public utility is required not

"to perform any service or to furnish any product or commodity unless or until the rates and other charges and classifications, rules and regulations relating thereto, applicable to such service, product or commodity have been filed and published in accordance with the provisions of this Act" (Appendix, pp. 40-41).

Section 36.

This section prohibits any public utility from making any changes in

"* * * any rate or any charge or classification, or in any rule, regulation, practice, or contract relating to or affecting any rate or other charge, classification or service, or in any privilege or facility, except after thirty days' notice to the Commission and to the public as herein provided. * * * Such proposed changes must be plainly indicated on the new schedule filed with the Commission by some character to be designated by the Commission, immediately preceding or following the item" (Appendix, pp. 41-43).

Section 38.

This section, in force since 1917, prohibits any utility from granting any preference or advantage to any corporation or person.

The alleged universal understanding, as a rate making practice, arbitrarily prefers non-subscribers of the Chi-

cago exchange service, who, as customers of the American Company, get free service at the expense of subscribers of the exchange service who are not customers of the American Company.

The alleged universal understanding arbitrarily prefers non-subscribers of the exchange service, who, as customers of the American Company, get free service at the expense of subscribers of the exchange service who are also customers of the American Company; the latter absorb their pro rata portion of the cost of their own use in the long distance service of the exchange plant facilities (*Southern Bell Tel. & Tel. Co.* v. *R. R. Comm. of Georgia,* 274 Fed. 438; certiorari denied, 262 U. S. 761). It arbitrarily prefers the subscribers of the exchange service who are customers of the American Company over the subscribers of the exchange service who are not customers of the American Company; the latter absorb part of the cost of rendering service to the former. There are twenty-two classes of exchange service (O.R. VI, 2134, Exhibit A). It is common knowledge that only a small percentage of local exchange subscribers are the large users of long distance service. This is confirmed by Appellee's witness (R. I, 277). It is unfair to *compel all subscribers for exchange service* to pay for a *right to use* the exchange plant facilities for a special use unless the probability of the exercise of the *right to that special use is distributed generally among such subscribers.**

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*The State Public Service Commission of Oregon found that where the cost to the exchange of making available its necessary facilities for the toll service is in excess of the revenue received by the exchange through the originating commission, "a discrimination in rates is constituted in favor of large toll users and against the majority of local subscribers adversely affecting approximately 70 per cent of the telephone users." (In re Pacific Tel. & Tel. Co., P. U. R. 1923, A. 531.)

The alleged universal understanding arbitrarily prefers the local toll service of Appellee over the subscribers of the local exchange service. The original long distance arrangement embodied in Section 10 of the Original License Contract of 1881 was part of the consideration for the grant to Appellee of licenses for both exchange service and local toll services (Appendix, p. 2). Any loss to Appellee resulting from the use in long distance service of any part of its necessary facilities would be an expense common to both the exchange service and local toll services and subject to apportionment between them. The alleged universal understanding to cover by Appellee's exchange service rates the entire loss, creates an arbitrary discrimination in favor of the local toll service.

DISCUSSION AS TO CONTENTION NUMBERED V.

V.

APPELLEE DID NOT PROVE THE EXISTENCE OF A UNIVERSAL UNDERSTANDING THAT EXCHANGE SERVICE RATES COMPENSATE THE EXCHANGE SERVICE OPERATOR FOR EVERY INTERSTATE USE OF ITS EXCHANGE PLANT FACILITIES.

A.

Appellee failed to prove the existence of a universal understanding covering interstate uses by non-subscribers of the exchange service.

The non-subscriber uses of exchange plant facilities come largely through public pay stations. From 1923 to 1931 the number of public pay stations in Chicago in-

creased 100%, from 11,000 to 22,000, the number of subscriber stations increased 42%, from 680,000 in 1923 to 969,000 in 1929, declining .5% to 917,000 in 1931. The popularity of use of public pay stations in Chicago is evidenced by the fact that both in number of stations and in revenue received, they showed an increase in the depression years 1930 and 1931 over 1929; the subscriber stations showed decreases in number of stations in 1930 and 1931, and a decrease in revenue in 1931; the public pay stations, though representing from 1.6% to 2.35% of total stations, constituted from 8.65% to 9.01% of total exchange revenues of the ten years under investigation (Appendix, p. 37).

Appellee endeavored to prove that an alleged universal understanding exists to the effect that non-subscribers of the exchange service in Chicago and in every other community can use the public pay stations therein to receive and to transmit long-distance message communications without paying for the use of such stations and the local facilities of each such community, the expense of which use is absorbed by the local exchange service subscribers of each such community. Appellee's proof consisted of:

(1) The recital in the Tariff and Route Book of the American Company's long-distance service, beginning with its Supplement of June 1, 1917, that:

> "The service covered by this tariff consists in furnishing for the use of patrons facilities, other than exchange facilities, intended for use in telephonic communication between the points listed. The exchange facilities used in connection with this service are the facilities required to establish connection between an exchange station and the toll board, or between an exchange station and the toll trunks, when such trunks are employed to effect connection with the toll board, and the use of such facilities is covered by

the charges for exchange service" (Appendix, p. 33) and

(2) The arrangement contained in the standard form of License Contract covering the use, without compensation to the exchange service operator, of exchange plant facilities in the American Company's long-distance service (R. V, 3005-7; O.R. IV, 1205).

It is clear of course that the recital in the American Company's schedule books could not bind Appellee or any other exchange service operator. As an accurate expression of a universal fact, such recital is of course contrary to Appellee's history. The record shows that the American Company, in December, 1917, in its dealings with Appellee, overlooked the special situation in Chicago in respect to long-distance uses of the Chicago exchange plant facilities and later made a correction to give effect to such special situation (O.R. VI, 1973). Nor does the record show any revision of the long-distance charges to conform to the scope of service as narrowed in 1917.

But there is nothing inconsistent between such recital and the arrangement covering the use of the exchange plant facilities of the Associated Companies, including Appellee, beginning with 1917 under the Mutual Plan of Operation of the Bell System. The record shows that the American Company, as the operator of the long-distance service, was able to pay operating expenses, interest and amortization on money borrowed applicable to such service and to yield an unreasonably large rate of return on its equity investment therein. Such rate of return, expressed as a percentage of outstanding capital and of corresponding capital and surplus, was:

	Per Cent Return on Capital and Surplus (R. VIII, 4396)	Per Cent Return on Capital Stock (R. VIII, 4398)
1923	18.95	23.53
1924	16.99	20.97
1925	19.70	24.12
1926	17.17	21.42
1927	14.27	17.89
1928	14.66	19.31
1929	13.53	17.94
1930	8.51	11.67

Certainly the excess over a reasonable return on investment, as appears from the above, is more than sufficient to offset, among others, the reduction in return on the American Company's equity investment in Appellee to which it would otherwise be entitled, as consideration for the American Company's use, without otherwise compensating Appellee, of the Chicago exchange plant facilities in the long-distance service (*infra,* 492, 494), to which compensation Appellee and only two other exchange service licensees were ever entitled (*supra,* 66).

B.

Appellee failed to prove the existence of a universal understanding covering the interstate uses by subscribers of the exchange service.

Appellee offered as proof of a universal understanding covering the interstate uses by subscribers to exchange service and compensation therefor as part of the exchange service and rates, two classes of evidence in addition to those already discussed (*supra,* 76) covering interstate uses by non-subscribers of the exchange service:

(1) recitals in certain filed schedule sheets of independent telephone companies in Illinois and elsewhere, substantially as follows (R. IV, 2793, *et seq.*):

> "The local exchange rates herein shown are for local exchange service which includes service and connection with the toll boards having connected thereto the toll lines with the ..... local exchange.
>
> "The Company acts as the agent for the long distance companies for the purpose only of quoting and collecting charges for service over the long distance lines of these companies and is not responsible or liable for any acts or omissions on the part of the owners or employees of said long distance companies or their connections."

(2) general statements of three witnesses (R. I, 274-5, 298, 300-1).

Insofar as the filed sheets represent the published rate-making practice of the utility concerned, they have no application here as Appellee did not establish any such practice by filing them in conformity with law. Insofar as they represent an affirmation of a pre-existing universal understanding, analysis of such schedules shows that convenience in the particular case and not a universal understanding governed the practice. Thus the Illinois sheets were all filed since *1923* by eight non-Bell companies out of several hundred operating in the State (R. IV, 2793-2807); such sheets were parts of schedules covering twenty-three communities, of which fifteen had from 69 to 500 telephone stations, four had from 500 to 1,000 stations, two from 1,000 to 2,000 stations, one had 3,719 stations, and one had 9,448 stations (R. VIII, 4454). In each case the sheets were part of *flat rate* schedules covering rural and village or city service (R. II, 1830-1; R. VIII, 4413-20). In each case the exchange service oper-

ator did not offer any toll service, but acted as agent to quote rates and collect charges (R. VIII, 4413, 4415). The schedules of non-Bell companies in other states covered situations similar to those in Illinois.

The general statements of a universal understanding were given by two employees of the American Company and by an employee of the New England Telephone & Telegraph Company (R. I, 270, 295, 300), no one of whom gave consideration to the facts of Appellee's history of exchange service rate-making and of its contractual relations to the operators of the interstate toll services, or to the provisions of the Illinois Statutes regulating Appellee's operations as a public utility (*supra,* 72). Insofar as their testimony covers situations such as that of the farmer lines in Illinois, or of the special situations elsewhere, already discussed (*supra,* 79), their testimony merely states the practice where convenience dictates the rate-making policy of the exchange service operator and no more.

In any event, their general statements in a field so important should not be accepted as adequate proof to support a finding of confiscation which voids state action (*Missouri Rate Cases,* 231 U. S. 474, at 501-2, 507).

LICENSE CONTRACT SERVICES AND PAYMENTS.

Introduction.

The story of the License Contract operations covers Appellee's relationship to the American Company. The activities of the American Company, during the period of the litigation embraced seven distinct fields:

(1) as Licensor, for valuable consideration, of inventions for use in the motion picture industry and others within the non-telephone field throughout the world;

(2) as Licensor, for valuable consideration, of inventions to four manufacturers other than Western for use in telephone communication equipment sold outside the Bell System in this country and abroad;

(3) as Licensor, for valuable consideration, of inventions to Western for use in telephone communication equipment sold to the Bell System, to other retail customers, and to distributors for resale throughout the world;

(4) As Owner and Operator of the Long Lines property in the long distance service;

(5) as Holding Company investor in the Associated Companies;

(6) as Holding Company investor in Western and other non-operating subsidiaries; and

(7) as Provider in part under the License Contract, of the efficient and economical management of such Associated Companies.

To cover the cost of the License Contract services (Item 7), the Associated Companies are charged yearly uniform assessments measured by a percentage of their current gross operating revenues.

In the regular course of its business, the American Company employs the practice of Mutual Life Insurance Companies to assure to each Associated Company and through it to the community served, the full benefit of the contributions of each of them without discrimination in favor of any other Associated Company or of any of its own non-license operations. The part of the yearly assessment which proves not to have been needed inures to the benefit of such Associated Companies as a part of the return to the American Company on its investment in their securities as an aid in financing them.* (See *Penn Mutual Life* v. *Lederer*, 252 U. S. 523 (1919); *Pacific Gas Co.* v. *San Francisco*, 265 U. S. 403, at 424 (1924)).

Appellee, however, did not follow the American Company's practice; it attempted to allocate to License Contract operations the proper proportion of the American Company's total expense in each department covering the seven different classes of operations, in the face of the admission by the Comptroller of the American Company, as Appellee's witness, that as late as 1931:

---

*The American Company states:

"In the Bell Telephone System taken as a whole more than in any other utility, profits are conserved within the System for the benefit of **the public and the stockholders.** There are intercompany profits on use of patents, on expert engineering advice, etc., and on manufacturers, but either through the 4½% payment or the dividends of the manufacturing company, these profits come to the treasury of the American Telephone & Telegraph Company, the financing company of the System. Except for the dividends on the small amount of stock of the associated companies in the hands of the public all profits of the Bell Telephone System ultimately come to the treasury of the American Telephone & Telegraph Company" (O.R. VII, 2583 (21)). "It retains for the ultimate benefit of the System and the public what the System itself has produced" (O.R. VII, 2602 (7)). (Boldface ours.)

> "This matter of separating expenses here, license contract expenses from other expenses, was quite a mystery and the department heads could not tell me very much" (R. II, 1175).

To show the fundamental errors in Appellee's presentation upon which the District Court's findings were based, requires the recounting of each of the relationships of the American Company. But as the same relationships are involved in the determination of issues herein covering Appellee's allocation of the expense of most of the departments of the American Company, the recounting of such relationships is given under the topic "American Company's Expense of Development and Research" (*infra*, 89 *et seq.*) to avoid duplication which otherwise would be necessary.

What the District Court Did.

In the years 1923 to 1925, inclusive, Appellee paid to the American Company 4½% and in 1926 and 1927 4% of its current gross operating earnings to cover rental of telephone instruments plus compensation for services specified in the License Contract then in effect (*Smith* v. *Illinois Bell Tel. Co.*, 282 U. S. 133, at 156, 157 (1930)). The telephone instruments were sold to the Associated Companies in 1927 (R. III, 2520; R. VIII, 4828), and the License payment was reduced effective January 1, 1928, to 2% of gross operating earnings to cover services only (*Smith* Case, *supra*). Beginning with 1929 the percentage has been 1½% (R. III, 2520).

Appellee's License payments applicable to its Chicago Intrastate business during the period under investigation, and the amounts found by the District Court properly chargeable as operating expenses are:

	Payments (R. III, 2519)	District Court's Finding of Proper Charges (R. III, 2519)	Difference
	a	b	a-b
1923	$1,662,014	$1,088,195	$573,819
1924	1,787,095	1,156,046	631,049
1925	1,901,069	1,369,836	531,233
1926	1,845,571	1,421,867	432,704
1927	1,980,880	1,422,869	558,011
1928	1,036,616	1,005,063	31,553
1929	834,276	834,276	.....
1930	864,131	864,131	.....
1931	834,199	834,199	.....

The District Court's findings of the proper charges to operating expenses for the years 1923 to 1927, inclusive, represent the total of (1) the fair rental of telephone instruments measured by the maintenance and depreciation charges as found by the District Court plus a return of 6% on the American Company's investment therein, (2) reimbursement of the American Company's expenses incurred in certain operations specified by the District Court (R. III, 2510-12), and (3) a return on the American Company's investment employed in its License Contract operations sufficient to pay interest and amortization on money borrowed and a 9% dividend on the capital stock applicable thereto. The District Court's findings of the proper charges to operating expenses for the years 1928 to 1931, inclusive, exclude provision for fair rental of telephone instruments as they were sold to the Licensees in 1927, and for the years 1929 to 1931, inclusive, represent the amounts paid by Appellee although they were less than the American Company's expenses determined by the District Court as applicable to License Contract operations. The difference between the amounts so paid and charged are:

	District Court's Finding of American Company's Costs	Payments Made	Difference
	a	b	a-b
1929	$1,040,529	$834,276	$206,253
1930	1,191,882	864,131	327,751
1931	1,068,303	834,199	234,104

The District Court disallowed for each year as part of the License Contract costs two items of expense (a) the difference between the income on and cost of obtaining the money for the revolving fund which the American Company claimed it held to make temporary advances to the Associated Companies, and (b) the federal income and franchise taxes paid by the American Company—on the ground that the operations covered by them are not under the License Contract. The total of such disallowed items ranged from $61,000 to $401,000 per year (R. III, 2511-12). For the years 1923 to 1928, inclusive, the District Court disallowed also as part of the License Contract costs properly chargeable as operating expense the excess of the amount actually paid under the percentage provisions of the License Contract and the American Company's expenses determined by it as applicable to License Contract operations, ranging from $31,553 to $631,049 per year (*supra*, 84; R. III, 2519).

The record contains no facts from which a finding could be made in respect to the License Contract services and charges for 1932, and the District Court made no finding thereon. But the District Court's finding on Appellee's return for 1932 under the existing rates and under the attacked rates gives effect to whatever payment Appellee made as proper.

Appellants' Position.

Appellants contend that the District Court's allowance was excessive for each year of the period by the following amounts (Appendix, p. 54):

	Appellants' Contentions	District Court's Findings	Excess
	(a)	(b)	(b)—(a)
1923	$513,000	$1,088,195	$575,195
1924	565,000	1,156,046	591,046
1925	629,000	1,369,836	740,836
1926	668,003	1,412,867	744,867
1927	713,000	1,422,869	709,869
1928	251,000	1,005,063	754,063
1929	248,000	834,276	586,276
1930	251,000	864,131	613,131
1931	243,000	834,199	591,199

The amounts which Appellants contend should be excluded cover the classes of expense of the American Company which include:

(1) a portion of the American Company's Development and Research expense to develop inventions applicable to the non-telephone field, to the telephone communication field outside the field covered by Western sales to its retail customers, and to the American Company—as the operator of the long-distance service, as the Holding Company investor in the securities of Appellee, and as the Licensor, for valuable consideration, of Western to manufacture and sell to Appellee products embodying the results of the Development and Research work covered by such expenses;

(2) a portion of the American Company's expenses applicable to it as a Holding Company investor of the stock of Appellee covering the cost of raising capital to make the investment, of servicing the American Company's out-

standing securities issued since 1886, and of operating ten departments whose operations are concerned in whole or in part with its functions as such Holding Company investor;

(3) the $30,395,800 transferred from 1924 to 1928, inclusive, by the American Company to its Reserve for Contingencies created in 1900.

Appellants further contend that any benefit which Appellee might have received from the classes of expenses so excluded was more than compensated by the four considerations of value (*supra,* 10; *infra,* 247) other than the percentage of Appellee's current gross operating revenues, received by the American Company from Appellee, which considerations (a) burdened Appellee's operating expenses for the benefit of the American Company, (b) were properly applicable as additional compensation for License Contract services rendered to Appellee, and (c) were not taken into consideration by Appellee or by the District Court in their determinations on License Contract.

Under Fair Return (*infra,* 464 *et seq.*) Appellants treat the portion of the recorded License Payment and the portion allowed as operating expense by the District Court, in excess in each case of the amount claimed by Appellants to be proper, as an advantage of additional pecuniary profit to the American Company on its investment in Appellee which is not received by the ordinary investor on his investment in business undertakings outside the Bell System.

Discussion.

The discussion on License Contract proceeds in the following order:

PAGE

Part I: The American Company's Expense of Development and Research 89

Part II: The American Company's Expense of Direct Distribution of New Securities and of Servicing Outstanding Securities 174

Part III: The American Company's Expense of Operating Ten Departments 184

Part IV: The American Company's $30,395,000 Appropriations to Reserve for Contingencies 194

Part V. Considerations Received by The American Company Applicable as Additional Compensation for License Contract Services Not Considered by the District Court 217

Part I.

American Company's Expense of Development and Research.*

Preliminary Statement of Facts.

The District Court found that the American Company's Development and Research expenses allocable to License Contract operations and properly chargeable to Chicago Intrastate Expenses were (R. III, 2509; R. IV, 2953-61, 2734-42):

1923	$139,476
1924	145,247
1925	160,036
1926	197,747
1927	241,935
1928	242,605
1929	293,601
1930	387,281
1931	355,295
1932	Undisclosed

Appellants' position is that the maximum which should have been charged to License payments as operating expense is (Appendix, p. 55):

1923	$ 7,100
1924	9,339
1925	9,810
1926	15,187
1927	30,169
1928	31,800
1929	30,212
1930	28,891
1931	25,120

*The issue presented in the text is distinct from the issue presented by Appellee's allocation of Western's Development and Research expense between Bell and non-Bell business and discussed herein, infra, 271.

The two principal classes of work covered by the Develment and Research expense* of the American Company were:

I. Work concerned with the protection of the telephone and telegraph plant from inductive interference from neighboring trolley wires, high tension circuits, electrolysis and lightning (R. I, 622; R. IV, 2844A-W). The expense of this class of work was comparatively small, ranging from $146,000 to $725,000 per year, and is not disputed (Appendix, p. 55):

II. Work in the development of the telephone art for the production of improved instrumentalities for the giving of electrical communication services (R. I., 622-5). The expense of this class of work was (R. I, 624; R. IV, 2845; R. IV, 2844A-W):

1923	$2,737,022
1924	2,920,670
1925	3,381,286
1926	3,983,571
1927	4,717,500
1928	4,824,186
1929	6,323,556
1930	9,143,027
1931	8,245,961
1932 (not available)	
Total	$46,276,779

*The Development and Research expense of the American Company for the years 1923 and 1924 was in each case the sum of the total expense of the department of the American Company known as "Development and Research," organized in 1919 (R. I, 616), plus a portion of the expense of the Engineering Department of Western billed to the American Company in each of said years (R. I, 617). The Development and Research expense of the American Company for each of the years 1925 to 1931, inclusive, was the sum of the total expense of its department of Development and Research, plus a portion of the expense of Bell Telephone Laboratories, Inc., a corporation organized in 1925 to take over the work of the Engineering Department of the Western (R. I, 617).

The work of the Engineering Department of Western and of the Bell

Chicago's portion of the expense was computed by Appellee through Dr. Jewett, Vice-President of the American Company, on the basis of allocating to Appellee as *one of the beneficiaries* of the development work a portion of the expense thereof (R. I., 629).

Beneficiaries of American Company's Development Work Classified.

In respect to benefits received, the beneficiaries of the development work, other than the American Company itself, may be grouped into two classes:

Class I—Beneficiaries of inventions embodied in telephone communication equipment:

Class II—Beneficiaries of the inventions embodied in special commercial products which were developed from the telephone communication field, but which found their commercial usefulness outside the telephone communication field.

Each of these two classes may be subdivided as follows:

Class I.

Beneficiaries of Inventions Embodied in Telephone Communication Equipment.

A. Western—Licensee since 1882 of inventions for use in telephone communication equipment for sale in the United States and for export. Such sales were made to the following classes of purchasers:

Telephone Laboratories, Inc., the expense of which was billed to the American Company, was of the same character as that of the American Company's department of Development and Research, except that the former made use of the laboratory facilities which the latter did not have (R. I, 616, 617).

(1) The Bell System customers:

(a) 24 Associated Companies—licensees of the American Company;

(b) The American Company's Long Lines;

(c) The American Company as a purchaser to December 31, 1927, of telephone instruments leased to the Associated Companies and to its Long Lines.

(2) Non-Bell customers:

(a) Retail customers in the United States (to 1925);

(b) Distributors for resale abroad;

(c) Distributors for resale in the United States (after 1925).

B. International Western—Licensee from 1918 to 1925 of inventions for use in telephone communication equipment for sale in all foreign countries other than Canada.

C. International Standard—Licensee since 1925 of inventions for use in telephone communication equipment for sale in all foreign countries other than Canada.

D. Northern Electric—Licensee since 1919 of inventions for use in telephone communication equipment for sale in Canada.

E. Automatic Electric—Licensee since 1925 of inventions for use in telephone communication equipment for sale in the United States and Canada outside the Bell System.

Class II.

Beneficiaries of the American Company's Inventions Embodied in Special Commercial Products.

A. Western—Licensee since 1919 to manufacture special commercial products for sale or license throughout the

world. To the date of the closing of the record herein, the principal licensed users have been:

(1) The motion picture producers and exhibitors comprising the 90% of the Motion Picture Industry in the United States and abroad—using systems and apparatus for the recording and reproducing of sound in timed relation with the taking and projection of motion pictures (R. II, 1243);

(2) Victor Talking Machine Company—using synchronized records for use in motion picture theatres (R. VIII, 4690, 4701);

(3) All the leading Phonograph Companies throughout the world—using systems and apparatus for the electrical or mechanical recording and reproducing of sound on or from phonograph records for use other than in synchronism or timed relation with motion pictures (R. VIII, 4827, 4708, 4715, 4719, 4726);

(4) Radio broadcasting stations—using the receiving and transmitting apparatus for commercial broadcasting (R. V, 3223, 3229, 3251-5);

(5) Other large users of special commercial products, including (a) airport ground stations and airplanes—using radio telephone equipment for the despatching of airplanes and for the maintenance of two-way telephone communication between the pilots and the airport personnel; (b) ocean liners and harbor craft of all kinds—using marine radio telephone equipment for ship to shore telephone service; and (c) schools, churches, auditoriums and others—using loud speaker equipment and public address systems (R. V, 3535, 3252, 3335).

Beginning with 1927, these licenses were granted to Electrical Research Products, Inc. (hereinafter designated

as Products) a wholly owned subsidiary of Western organized for that purpose (R. I, 321-2; R. VIII, 4565, 4571).

What the District Court Did.

The District Court's finding (No. 22, R. III, 2519), without discussion, adopted Appellee's presentation of the Development and Research expenses to 1932 as properly chargeable to Chicago as an operating expense. No showing or finding was made for 1932.

Appellee's presentation was:

(1) Dr. Jewett eliminated certain items which passed through the books of the Department of Development and Research but which were not properly charged to that department (R. I., 623).

(2) Dr. Jewett then allocated the American Company's entire Development and Research expense to Western's sales of telephone communication equipment manufactured by it without allocating any portion of such expense to Western's sales of special commercial products or to the four licensed manufacturers other than Western.

(3) Dr. Jewett then allocated the expense between Western's Bell and non-Bell sales on the basis of the relative sales to each class. In the non-Bell sales to distributors for resale, he included only Western's price to them.

(4) The Bell System portion, allocated as above stated, Dr. Jewett then prorated among the Associated Companies and the American Company's Long Lines on the basis of plant in service. He determined Chicago's portion on the basis of the ratio of the plant in service in Chicago to the total plant in service in the territory of all the Associated Companies and the Long Lines (R. I, 721).

(5) Appellee's showing of the License Contract costs properly chargeable to Chicago, made through Mr. Heiss, Comptroller of the American Company, included as a part thereof the entire portion of the expense determined by Dr. Jewett in the manner above stated (R. IV, 2953-60).

To the District Court's findings, Appellants assigned error (R. III, 2533-6) and in support of their position offer the following:

SUMMARY STATEMENT OF APPELLANTS' CONTENTIONS.

I. The allocation to Western's sales of telephone communication equipment of the portion of the American Company's development and research expense applicable to special commercial products unjustly enriched the American Company by $5,226,141, cash royalties received from 1923 to 1931, inclusive, and by the value of the right to receive thereafter royalties for the use in such field of its inventions developed prior thereto and by the excessive return on its investment in Products.

II. The allocation to Western's sales of telephone communication equipment of the portion of the American Company's development and research expense applicable to the other four licensed manufacturers of such equipment unjustly enriched the American Company by a substantial portion of more than $20,000,000 received from them during the period 1923 to 1931, inclusive, and the value of the right to receive thereafter royalties from them.

III. The allocation to Western's Bell sales of the portion of the American Company's development and research expense applicable to Western distributors for resale unjustly enriched the American Company by a substantial

portion of more than $20,000,000 received from them during the period 1923 to 1931, inclusive, and by the value of the right to receive thereafter royalties from them.

IV. The allocation of the Bell System portion of the American Company's development and research expense between the Associated Companies on the one hand, and the American Company's Long Lines on the other hand, on the basis of plant in service, unjustly enriched the American Company by more than $20,000,000.

A. Appellee allocated pooled expenses of work covering problems having dissimilar application to and dissimilar results on dissimilar operations of dissimilar plants of the Associated Companies, on the one hand, and of the Long Lines, on the other hand.

B. Appellee's allocation assumes but does not prove that the allocation on the basis of plant investment of the pooled expenses having dissimilar applications to and having dissimilar effects on the Associated Companies and on the Long Lines will produce a fair result to each of them.

C. Appellee's allocation by classification between the Associated Companies and the Long Lines did not and could not prove the reasonableness of its allocation of the Bell portion of development and research expense between the Associated Companies and the Long Lines.

D. The American Company was unjustly enriched by Appellee's allocation, approved by the District Court, at the expense of the Associated Companies for the period 1923 to 1931, inclusive, by an amount in excess of $20,000,000.

V. The allocation to the License Contract payment of the portion of the American Company's development and research expense applicable to it as the Holding Company

Investor in the Associated Companies, and as the Licensor of Western to manufacture and sell to them products embodying the result covered by such expense unjustly enriched the American Company by more than $6,000,000.

VI. The District Court's finding that the entire amount of charge to license contract payments to cover development and research expense should be allocated to operating expense and no part thereof to fixed capital account, unduly burdened Appellee's customers to the extent of from 25% to 75% of such charge during the years 1923 to 1931, inclusive.

DISCUSSION AS TO CONTENTION NUMBERED I.

I.

THE ALLOCATION TO WESTERN'S SALES OF TELEPHONE COMMUNICATION EQUIPMENT OF THE PORTION OF THE AMERICAN COMPANY'S DEVELOPMENT AND RESEARCH EXPENSE APPLICABLE TO SPECIAL COMMERCIAL PRODUCTS UNJUSTLY ENRICHED THE AMERICAN COMPANY BY $5,226,141 CASH ROYALTIES RECEIVED FROM 1923 TO 1931, INCLUSIVE, AND BY THE VALUE OF THE RIGHT TO RECEIVE THEREAFTER ROYALTIES FOR THE USE IN SUCH FIELD OF ITS INVENTIONS DEVELOPED PRIOR THERETO, AND BY THE EXCESSIVE RETURN ON ITS INVESTMENT IN PRODUCTS.

Dr. Jewett explained his failure to allocate any portion of the Development and Research expense to purchases of special commercial products, on the ground that "to what-

ever extent the benefits of the research and development work of the American Company are found in the special commercial products, those values have been paid for in ways other than by an allocation of the credit for expense of development and research'' (R, I, 720).

The District Court adopted Dr. Jewett's allocation of expense, but failed to carry out his intent to have proper offsetting credit allowed for the values received by the American Company from the non-telephone field (R. III, 2519).

Historical Basis for the Payment of Royalties to the American Company for the Use of Its Inventions in Telephones.

The arrangements covering the use of the American Company's inventions embodied in special commercial products date back to 1879.

Period 1879-1919.

Western Union Contract of 1879.

By the Western Union Contract of 1879 (Appendix, p. 1), the National Bell agreed to rent and not to sell Telephones in the United States and to pay over to the Western Union 20% of the rent and royalties received by it during the 17-year period of the contract, plus 20% of the net profits on all Telephones manufactured by it or through it and exported to foreign countries and to Canada (O.R. VI, 1887).

The term ''telephone'' was defined therein as (O.R. VI, 1888, Art. 2 (1)):

> ''an instrument for electrically transmitting or receiving articulate speech, and is understood to mean either a transmitting instrument, incapable of use as a receiver, a receiving instrument incapable of use as a

transmitter, or an instrument capable of being used both as a transmitter and receiver."

The contract contemplated that the National Bell might acquire the inventions in telephones; provided for reimbursement from rentals or from the Western Union for the cost incurred in such acquisition; and provided that if the inventions acquired covered rights in telephones "which are to be applied to purposes other than telephonic," the cost should be pro-rated according to the purpose for which they were to be used" (O.R. VI, 1895).

The contract also granted to the National Bell, without royalty to the Western Union, an exclusive license to make and use, and to license others to make and use, all inventions then owned or thereafter acquired by the National Bell in call bells, switches and other appliances (called herein "Telephonic Appliances") for use on telephone lines in connection with Telephones (Art. 5, O.R. VI, 1894).

Western Electric Contract of 1882.

The difference in treatment of Telephones and Telephonic Appliances required by the Western Union Contract of 1882 was preserved in the perpetual manufacturing license contract granted in 1882 by the American Bell, as the successor to the National Bell, to Western, a manufacturing company organized by the American Bell, and in which the American Bell owned 50.8% of the original 10,000 shares of stock (O.R. VI, 2064), of which 24% was given as bonus consideration for such license (R. VIII, 4376a). At this point we consider only the treatment of "Telephones." On page 116, the treatment of Telephonic Appliances is considered.*

*The difference in treatment of Telephones and Telephonic Appliances was preserved also in the license contracts of the Associated Companies (infra, 117).

By the Western Electric Contract of 1882, Western was given the exclusive right to manufacture, on a cost plus basis, Telephones for—but only for—the American Bell and its successors and assigns, whether for use in the United States or for export, whether for use in the telephone field or in the non-telephone field; the consent or release of the American Bell, upon conditions stipulated by the American Bell, was required to permit Western to sell Telephones to others than the American Bell. Western agreed to sell to the American Bell, at the latter's election, at actual cost, all inventions in Telephones, which Western then owned or might thereafter acquire and agreed to embody in Telephones such inventions as the American Bell might develop and/or acquire and from time to time prescribe. The American Bell was not obligated to undertake development and research work to develop inventions in Telephones, but if it did so, its cost was not to be reimbursed by the Western Electric; such cost was part of the American Bell's expense of doing business, to be liquidated, if at all, from income received by it through the sale or use of the Telephones (O.R., VI, 2068).

The term "Telephone" was broadened in the Western Electric Contract of 1882 to include many products which were not covered by the term "Telephone" in the Western Union Contract of 1879. In addition to receivers and transmitters, "Telephone" under the Western Electric Contract of 1882 was defined to embrace also "all attachments and devices which serve to cause, to improve, or to modify the articulating current or the effect thereof" (O.R. VI, 2068-9).

Period 1919-1932.

Commercial Application of Inventions in Telephones Within and Outside Telephone Communication Field.

Prior to 1919, the items which had been developed and were classified as "Telephones" under the Western Electric Contract of 1882 found application in the *telephone field* only—such items were principally telephone instruments, receivers and transmitters—and devices such as repeaters to revivify or amplify the message currents, used almost exclusively in the American Company's Long Distance Message Communication and Telegraph Services (*infra*, 117).

Beginning with 1919, however, the situation changed. Inventions within the classification of "Telephones," under the Western Electric Contract of 1882, found commercial application in the non-telephone field, and were embodied in items manufactured by Western and known as Special Commercial Products. Such products included vacuum tubes and related apparatus for use in the non-telephone field (1919)*; loud speader equipment (1921); current supply set as accessory to loud speaker equipment and a voice frequency signalling system (1922); input equipment for radio broadcasting (1924); electrical phonograph recording and reproducing apparatus, audiophones and audiometers for noise measurement, picture transmission equipment, talking motion picture equipment (1925); phonograph sound boxes and accoustic apparatus, talking picture equipment, and electro-magnetic sound reproducers (1926); talk-

*The year indicated in parenthesis is the year of release by the American Company to Western to manufacture and sell in the non-telephone field (R. VIII, 4634-7). The story of the development of the inventions is given in R. V, 3599 et seq.

ing picture equipment (1927); electrical recording apparatus for broadcasting (1929); stethescope, sound measurement apparatus and radio telephone equipment (1930); public address system, music distribution system, sound picture system, radio broadcasting system, input equipment for radio broadcasting, photoelectric cells for industrial purposes (1931) (R. VIII, 4634-7). The users of these products are classified on page 91, *supra.*

Revenues and Values Received by the American Company for the Use of Its Inventions in Telephones in the Non-Telephone Field.

Beginning with 1919, written releases were given from time to time by the American Company to Western to manufacture and sell special commercial products (R. VIII, 4634) embodying the American Company's inventions in "Telephones" as defined under the Western Electric Contract of 1882 (O.R. VI, 2068-9). Such releases provided for the payment of royalties to the American Company on two bases:

(a) Where the product manufactured by Western was sold, the American Company was to receive a per cent of the selling price ranging from 5% to 10%. In 1928, for convenience, the parties agreed on a flat royalty of 3½% of all sales of special commercial products (R. VIII, 4689).

(b) Where the product was sold or licensed for use under a royalty agreement the American Company was to receive, in addition to the royalty on Western's sale of the product, a portion ranging from 5% to 33⅓% of the gross royalties received by Western or by its subsidiaries, as agents, for the use of the system or apparatus.

The revenues and values received were:

(1) During the period 1923 to 1931, inclusive, the American Company received as its share of the royalties from licensees for the manufacture and use of special commercial products, $5,226,141 (R. VII, 4149-53; R. VIII, 4640):

	Western	Motion Picture Industry	Phonograph Companies	Radio Broadcasting Stations and Others	Total
1923.....	94,477				94,477
1924.....	67,677			45,859	113,536
1925.....	82,797		42,923	86,796	212,516
1926.....	77,414		93,645	89,922	260,981
1927.....	203,223	29,883	167,660	139,661	549,427
1928.....	218,298	43,010	163,084	81,501	505,893
1929.....	899,934	245,146	57,595	30,426	1,233,101
1930.....	514,653	526,242	62,087	26,673	1,129,655
1931.....	162,048	902,242	54,085	17,180	1,135,555
1932	not available	not available	not available	not available	not available
Total...	$2,320,521	$1,746,523	$641,079	$518,018	$5,226,141

(2) On December 31, 1931, the American Company had the right to receive thereafter:

(a) Royalties from outstanding licenses to Western for the sale of special commercial products outside the telephone communication field embodying the American Company's patents and inventions (R. VII, 4149-52; VIII, 4640);

(b) Royalties from outstanding licenses to the motion picture producers and exhibitors comprising over 90% of the industry in the United States and abroad, to the Victor Talking Machine Company, to the Columbia Phonograph Company, to the Gramophone Company, Ltd., to The International Standard Electric Company and to others, for the use of the American Company's patents and inventions embodied in systems and apparatus used by them outside the telephone communication field (R. VIII, 4701a, 4708, 4719, 4726, 4741, 4749).

From the record it is impossible to state definitely the unexpired life of the patents for inventions or the length of the period beyond 1931 during which the American Company will continue to receive royalties from Western on sales of special commercial products embodying inventions developed prior to that date. The licenses for the use of such products would indicate that sales of such products might continue to 1940 and beyond (R. VIII, 4732). The licenses to the Motion Picture Industry were granted from and after 1927, and their period was usually ten years (R. II, 1243). The licenses to the Phonograph Companies were granted beginning with 1925 and their period extended in some cases to 1935—in others to 1940 and beyond (R. VIII, 4732).

None of the licenses requires further development and research work beyond 1931 by the American Company for its share of the royalties to be received thereafter. As such work resulting in the inventions embodied in these products had all been done prior to December 31, 1931, and the cost thereof currently charged during this period, the right of the American Company on December 31, 1931, to receive royalties in respect to the sales of these products for the many years beyond 1931 is as much *an item of value* to be considered as the cash royalties actually received to 1932.

That the right is valuable, no one can doubt. That the value of the annuities is great and will continue in spite of the depression may be judged from the fact that the royalties from the Motion Picture Industry showed continued increase (R. VII, 4149-53; R. VIII, 4640) in the face of declining sales of new installations in the last two years (R. IV, 2840a).

(3) The American Company as the investor in over 98% of the stock in Western, received the benefit of the

unreasonably large return which Products earned through the exploitation of the inventions developed in the telephone communication field prior to its organization in 1927 (*infra,* 276). The return on the capital and surplus of Products resulting from its operations was (R. VI, 3957):

1927	63.6%
1928	51.0%
1929	68.1%
1930	18.2%

Nor does such rate of return give effect to the value of the right of Products on December 31, 1930, to receive two-thirds of the royalties yet to come on the long term royalty contracts to the Motion Picture Industry and to the Phonograph Companies extending to 1940 and beyond (*supra,* 103). The fact that Products spent much money to make the inventions commercially practical in the non-telephone field beginning with 1927, or that Products is a separate corporation, neither closes the door to a full disclosure and consideration of such profits nor relieves Appellee from the burden to justify the license payment as an operating expense by a fair presentation of the profits made by the American Company therefrom, including profits which it for convenience chose to have remain in the treasury of its subsidiaries.

The District Court should have allocated a portion of the Development and Research expense to the non-telephone field (*Smith* Case, 282 U. S. 133, 157) or should have offset the burden on Appellee through its failure so to do by crediting the revenues and values received by the American Company and its subsidiaries applicable thereto (*Smith* Case, 282 U. S. 133, 157; *Southwestern Bell Tel. Co. v. Pub. Serv. Co.,* 262 U. S. 276).

DISCUSSION AS TO CONTENTION NUMBERED II.

II.

THE ALLOCATION TO WESTERN'S SALES OF TELEPHONE COMMUNICATION EQUIPMENT OF THE PORTION OF THE AMERICAN COMPANY'S DEVELOPMENT AND RESEARCH EXPENSE APPLICABLE TO THE OTHER FOUR LICENSED MANUFACTURERS OF SUCH EQUIPMENT UNJUSTLY ENRICHED THE AMERICAN COMPANY BY A SUBSTANTIAL PORTION OF MORE THAN $20,000,000 RECEIVED FROM THEM DURING THE PERIOD 1923 TO 1931, INCLUSIVE, AND THE VALUE OF THE RIGHT TO RECEIVE THEREAFTER ROYALTIES FROM THEM.

What Dr. Jewett Did.

Dr. Jewett received from Western the figures of its Bell and non-Bell sales (R. I, 630-1) and on the basis thereof allocated the entire amount of Development and Research expense between the two classes of business (R. IV, 2846-7).

Western's sales cover:

(1) Western's Bell sales.

(2) Western's non-Bell sales for use in the United States:

(a) 1923-1925—Sales made direct to the ultimate user (R. VIII, 4878);

(b) 1926-Nov. 1, 1928—Sales to Graybar Electric Company, a wholly owned subsidiary, for resale (R. VIII, 4878);

(c) Nov. 1, 1928—Sales to Graybar Electric Company, an independent distributor, for resale.

(3) Western's non-Bell sales for export:
  (a) For export to foreign countries other than Canada:
    (1) 1923-1925—Sales to International Western, a wholly owned subsidiary, for resale to countries where no International Western factories were established (R. VIII, 4878);
    (2) 1926—Sales to International Standard Electric, an independent distributor, for resale in foreign countries other than Canada (R. VIII, 4878).
  (b) For export to Canada:
    (1) 1923—Sales to Northern Electric, in which Western held a substantial though not a controlling stock interest, a distributor for resale (R. VIII, 4878).

What Dr. Jewett Did Not Do.

But Dr. Jewett did not allocate any portion of the American Company's Development and Research expense to the four licensed manufacturers: International Western, International Standard Electric, Northern Electric and Automatic, and did not credit as an offset the following revenues and values received by the American Company from them for such licenses:

1. License to International Western.

Prior to 1918, Western operated in foreign countries through subsidiaries and its own foreign factories. From 1915 to 1919, the foreign activities of Western were interrupted by the War; the foreign sales, if any, were largely of war materials and of telephone materials particularly adapted to the conduct of the War; practically no effort was made abroad to develop the telephone art or to use the inventions developed in the United States (R. I, 496). In 1918 Western's foreign subsidiaries and foreign factories

were turned over to International Western, a wholly owned subsidiary. From and after the date of its organization to October 1, 1925, when its business was sold to the International Telephone & Telegraph Co. (*infra*, 109), International Western received all the foreign rights to the inventions of the American Company and of Western then owned or thereafter developed. *The American Company received no compensation therefor or reimbursement for any portion of the cost of developing its own inventions* (R. VIII, 4845, 4849). International Western had its own factories in England, on the continent of Europe and in Japan and was engaged in *manufacturing and selling* telephone communication equipment in those places (R. I, 320). Only where its own local manufacturing was not possible, did International Western sell telephone communication equipment manufactured by Western's factories in the United States and sold to it as distributor for resale (R. I, 329). Obviously telephone communication equipment received the same benefit of the same inventions of the American Company, whether manufactured by the Western for export, to which Dr. Jewett gave effect, or manufactured by the foreign factory of the International Western, to which Dr. Jewett did not give effect in his allocation (R. VIII, 4528).

The record shows:

	Western's Sales to International Western for Resale		Total International Western Sales	
1920			$41,300,000	(R. VIII, 4529)
1921	$6,702,000	(R. VIII, 4878)	$41,000,000	(R. VIII, 4529)
1922	$1,987,000	(R. VIII, 4537)	$35,000,000	(R. VIII, 4534)
1923	$3,495,000	(R. VIII, 4537)	$36,500,000	(R. VIII, 4546)
1924	$4,273,000	(R. VIII, 4556)	$43,800,000	(R. VIII, 4557)
1925	$3,443,000	(R. VIII, 4561)	Not available	(R. VIII, 4562)

The record does not show the distribution of sales of International Western between supplies and telephone communication equipment; nor does it show the sales for 1925.

Turning now to the values received by the American Company for the use of its inventions, we find that International Western started in 1918 with a capital of $7,500,000 (R. VIII, 4528; R. VI, 3927). On its capital and surplus, International Western earned in

1919.....	7.7%	
1920.....	5.9%	
1921.....	12.6%	
1922.....	15.8%	
1923.....	11.9%	
1924.....	30.6%	
1925.....	8.5%	(6 months) (R. VI, 3928).

From 1920 to 1925, Western received in current cash dividends $3,912,500, and on September 30, 1925, a special cash dividend out of surplus of $9,700,000 (R. VI, 3927).

On October 1, 1925, the International Telephone and Telegraph Company acquired the interest of Western in International Western and in the latter's foreign telephone business outside of Canada and Newfoundland (R. VIII, 4560). As part of the same transaction, the American Company and Western each granted to the International Standard Electric (successor in name of International Western) a license to the foreign rights in the inventions of the American Company and Western in telephone communication equipment then in effect and thereafter to be acquired by each of them for a period of 15 years (R. VIII, 4822, 4845-7), and appointed the International Standard Electric to act for 15 years as the exclusive distributor of Western's products in all countries except the United States, Canada and Newfoundland. The consideration paid to Western for the conveyance of its interest, and for the grant of patent rights by it and by the American Company and for the commercial contract were:

(1) $29,306,534 in cash (R. VIII, 4890, 4563);

(2) The payment by the International Standard Electric of a yearly royalty of ½% of its sales of telephone communication equipment other than such which it purchased from the Western (R. VIII, 4884);

(3) The right to use patents developed or owned by the International Standard Electric (R. I, 494).

The $29,306,534 cash represented $9,544,081 more than Western's investment in International Western at the date of sale on September 30, 1925, after Western first withdrew and paid to itself a cash dividend out of the accumulated surplus of $9,700,000 in the treasury of International Western (R. VIII, 4890), and resulted in a net profit to the Western of $6,255,095 (R. VIII, 4890; R. VI, 3927). This amount the Western passed on to the American Company on December 31, 1927, as part of a special $47,938,865 cash dividend* received by the American Company from Western.

That the American Company's grant of patent rights was considered an important consideration is unmistakably clear from the statements of the International Telephone and Telegraph Company itself. To raise the $29,306,534 the International Telephone and Telegraph Company sold a $35,000,000 bond issue to J. P. Morgan and Company in 1925, the bonds being immediately resold to the public. In the letter to J. P. Morgan and Company, which the latter reproduced in its circular reselling the bonds, the President of the International Telephone and Telegraph Co. stated:

*Western transferred to Products at the date of its organization December 31, 1926, $41,693,000 in cash and United States Government Securities and its stock investments in three companies valued at $8,070,000. On December 31, 1927, Products declared a regular dividend to Western of $3,750,000, and a special dividend of $45,000,000 (R. V, 3723) and Western declared a special cash dividend of $48,750,000 of which the American Company received $47,938,865 (R. V, 3321).

"International Telephone and Telegraph have a 15-year Contract to act as exclusive distributors of Western Electric products in all countries except United States, Canada and Newfoundland. International Standard Electric will have also an agreement under which are acquired rights to several groups of telephone patents which taken together are by far the most valuable in existence" (R. V, 3613).

2. LICENSE TO INTERNATIONAL STANDARD ELECTRIC—1925.

Beginning with October 1, 1925, International Standard Electric received, under the license just stated (R. V, 3613), the benefit of the American Company's inventions for use in telephone communication equipment manufactured by its own factories. Western received the specified royalties from the International Standard Electric each year since 1925, but the amount thereof is included with royalties received from other sources and the exact amount thereof cannot therefore be determined (R. VIII, 4884). The American Company, of course, benefited therefrom as equity investor in Western.

Western sold to International Standard Electric telephone communication equipment each year beginning with 1926 (R. VIII, 4878) and Appellee included such sales (R. VIII, 4878) as part of the non-Bell sales participating in the benefits of the development and research work of the American Company. But Appellee did not include as part of such sales any sales made by International Standard Electric from its foreign factories making use of the American Company's inventions. The amount of such sales is not in the record. Nor did it give consideration as an offsetting credit against the cost of the American Company's development and research work to any portion of the profit from the cash consideration paid in 1925, or

of the royalties received to 1932, or of the right to receive royalties thereafter to 1940 (*supra,* 109).

3. License to Northern Electric Company, Ltd.

International Western in 1919 granted to the Northern Electric Company, Ltd., a Canadian Corporation, 43% of whose stock Western owned (R. I, 491; R. VIII, 4675, 4679), a perpetual non-exclusive license to the invention which International Western then owned or thereafter would acquire (*supra,* 108) covering telephone communication equipment. Such rights, of course, included those received from the American Company. The Northern Electric was given the right to purchase telephone communication equipment products from Western or to manufacture or to have them manufactured in Canada. The Northern Electric agreed to pay for such license 1% of its sales of such products (R. VIII, 4679, 4684). On September 30, 1925, International Western assigned its interests in the license contract to Western (R. VIII, 4689).

Appellee included as part of the non-Bell sales Western's sales to the Northern Electric (R. VIII, 4878). It did not include nor does the record show the amount of the Northern Electric sales of telephone communication equipment from its own factories. Nor did Appellee give consideration as offsetting credit to the benefits which the American Company received through its investment in Western (a) from the royalties paid by the Northern Electric for the license to use the American Company's inventions and (b) the unreasonably large return received by the Western from its investment in the Northern Electric.

For the period 1923 to 1926 the royalties paid by the Northern Electric to Western were $223,000. For the period beginning with 1926 the record does not separate

the royalties received by Western from the Northern Electric from other royalties (R. VIII, 4878).

The return to Western on its $1,300,000 investment in the Northern Electric during the period under investigation was (R. VI, 3959):

1923	18.9%
1924	18.0
1925	25.1
1926	41.0
1927	39.8
1928	37.8
1929	46.5
1930	16.7

4. License to Automatic Electric Company.

In 1919, Western contracted to purchase from the Automatic Electric Company step-by-step central office equipment for a period of five years (R. I, 462; R. VI, 3765; R. VIII, 4593). As part of the same transaction, the American Company procured a five-year option from the owners of a controlling interest in the stock of the Automatic to purchase the stock (R. VI, 3765). The purpose of the option was to give "assurance that the quality and price of the apparatus delivered would be satisfactory" (R. I, 463). The terms of the option were such as to hold down the profits of the Automatic (R. VIII, 4597; R. VI, 3765-9; R. I, 463).

On the expiration of the 1919 contract, Western made another purchasing contract with the Automatic covering the same subject-matter, to expire December 31, 1929 (R. VIII, 4613). As part of the same transaction, the American Company's option having expired, another option was given to December 31, 1929, covering the controlling stock of Automatic, but the option was made to run to Western instead of to the American Company (R. I, 463).

In 1925 the American Company, Western and Automatic entered into an agreement to continue to December 31, 1929 (R. VIII, 4847-50), by the terms of which:

> (1) *Automatic* granted to the American Company and Western a non-exclusive license to use the patents and inventions of Automatic then owned or thereafter acquired prior to December 31, 1929, for the full period of such patents, for use in the United States by the Bell System and non-Bell customers of Western and by anyone in Alaska;
>
> (2) *The American Company and Western* granted to Automatic a non-exclusive license to use their respective inventions and patents then owned or thereafter acquired prior to December 31, 1929, for the full period of such patents for use in the United States and Canada and covering "automatic, semi-automatic telephone switching systems and telephone switching apparatus and devices of the designs and types which have heretofore been made and sold by the Automatic Company for the Independent telephone trade" (R. VIII, 4848).

By 1927 the owners of Automatic had undertaken to expand their telephone operations and had acquired many independent telephone operating companies (R. I, 464),—prospective purchasers of equipment manufactured by Automatic.

On May 24, 1927, the American Company, Western and Automatic extended the period during which the exchange of licenses provided for in the 1925 contract should continue to December 31, 1936 (R. VIII, 4868-9). At the same time Western extended its contract with Automatic to purchase step-by-step equipment from the Automatic to

December 31, 1936 (R. VIII, 4617, at 4622). As part of the same transaction, Products received the obligation of Automatic for $4,000,000 payable over the period to 1936, which obligation was paid in full prior to 1931 (R. VI, 3958).*

Appellee produced a witness who stated that as part of the transaction of May 24, 1927, Western's option on the controlling stock of the Automatic was surrendered to the owner of such stock (R. I, 463). The $4,000,000 was passed on to the American Company through Western's dividend of $47,938,865 on December 31, 1927 (R. I, 465).

What part of the $4,000,000 represents the consideration for the extension of the American Company's license to use its inventions, the record does not show. The record shows that the President of Western, who as President of Products, carried on this transaction, and who also executed, on behalf of Western, the patent license agreement of May 24, 1927 (R. VIII, 4868), recorded at about the time of the transaction that "the figure of four million dollars was arrived at on the basis that the payment was fully warranted for the assets involved" (R. VIII, 4609). Neither Appellee nor the District Court gave effect to this payment or to any portion thereof.

*The $4,000,000 transaction is discussed in greater detail infra, 272, et seq.

DISCUSSION AS TO CONTENTION NUMBERED III.

III.

THE ALLOCATION TO WESTERN'S BELL SALES OF THE PORTION OF THE AMERICAN COMPANY'S DEVELOPMENT AND RESEACH EXPENSE APPLICABLE TO WESTERN'S DISTRIBUTORS FOR RESALE UNJUSTLY ENRICHED THE AMERICAN COMPANY BY A SUBSTANTIAL PORTION OF MORE THAN $20,000,000 RECEIVED FROM THEM DURING THE PERIOD 1923 TO 1931, INCLUSIVE, AND BY THE VALUE OF THE RIGHT TO RECEIVE THEREAFTER ROYALTIES FROM THEM.

Preliminary Statement.

The arrangements covering the use of the American Company's inventions embodied in telephonic appliances manufactured by Western date back to 1879.

Period 1879-1919.

Western Union Contract of 1879.

By the Western Union Contract of 1879 the National Bell was granted, without royalty to the Western Union, an exclusive license to make, use and to license others to to make and use, inventions in telephonic appliances (*supra,* 98).

Western Electric Contract of 1882.

By the Western Electric Contract of 1882, Western was granted an exclusive manufacturing license to manufacture

for sale in the United States or for export, telephonic appliances embodying the American Company's inventions. Western agreed to reimburse the American Company the cost of inventions which Western desired to have licensed to it. In this respect the arrangement was opposite to that covering the American Company's inventions in telephones (*supra,* 98). As consideration for the manufacturing license Western gave to the National Bell* 2,000 shares of stock representing 24 per cent of its outstanding stock (*infra,* 168).

Prior to 1919, the American Company's Engineering Department undertook fundamental research and the exploration of new ideas leading to inventions in telephonic appliances, but the cost thereof was reimbursed by Western as the inventions were licensed to Western under the Western Electric Contract of 1882. During the same period, Western's Engineering Department undertook the same work as the American Company, and, in addition, undertook research work with respect to the designing of equipment and the development of manufacturing processes to be employed in manufacturing the equipment embodying the inventions developed by it and by the American Company (R. III, 2144).

License Contracts with Associated Companies.

Prior to 1919 the American Company was not obligated to the Associated Companies to conduct development and research work to develop inventions for use in telephonic appliances. But the Associated Companies had the right to demand, and the American Company had the obligation to make available such inventions as did develop and

*In 1899 the American Company by assignment, succeeded to this stock (O.R. VI, 2067).

which were embodied in telephonic appliances manufactured by Western upon the payment by such Associated Companies of such uniform royalties as the American Company from time to time might establish. Such royalties, if any, were specified to be in addition to the royalties for the use of inventions in Telephones (O.R. VI, 1927), but whether such royalties were to be in addition to or as part of the manufacturer's price was not stated in the contract between the parties (O.R. VII, 1927). But no such additional or separate royalty was in fact charged by the American Company to 1919.

Non-Bell Sales.

Prior to 1908, telephonic appliances, manufactured by Western, were available only to the Associated Companies by purchase from Western. Beginning with 1908 telephonic appliances manufactured by Western became available also to non-Bell customers by purchase. But such non-Bell purchasers paid no royalty or compensation to the American Company for the use of its inventions embodied in such appliances (R. VIII, 4884).

Prior to 1919, Western's sales price of a telephonic appliance to Bell and non-Bell customers paid for the item, plus all royalties and compensation for the value of the American Company's inventions as well as for Western's inventions embodied therein.

Period 1919-1932.

Organization of Department of Development and Research.

In 1919 the American Company organized the Department of Development and Research (R. I, 616; R. III, 2144). This department took over the development and

research work of the Engineering Departments of the American Company and of Western, and took over from Western the duty of making the final determination as to which and when inventions should be embodied in telephonic appliances, and should be made available as standard in the Bell System (R. III, 2144, 2146).

Beginning with 1919 the Engineering Department of Western confined its activities to research work to develop designs and manufacturing processes for the manufacture of telephonic appliances embodying the inventions of Western and of the American Company (R. III, 2144, 2146).

Revision of Western Electric Contract of 1882.

By revision of its arrangement with Western the American Company, after 1919, was not reimbursed by Western for the cost to the former of developing inventions embodied in telephonic appliances manufactured by the latter (R. I, 722). But Western continued to use the American Company's inventions in telephonic appliances sold to its Bell System and non-Bell customers.

Revision of Associated Companies' License Contracts.

By revision of its License Contracts with its Associated Companies, the American Company obligated itself, beginning with 1919, to conduct development and research work to develop inventions in telephonic appliances, but the American Company was given the right to determine what inventions were to be embodied in telephonic appliances. For this work the American Company, beginning with 1919, was to receive, through the yearly license payments, royalty for the use by the Associated Companies of inventions embodied in telephonic appliances manufac-

tured by Western, *such royalty being in addition to and separate from the price paid by them to the Western Electric for the telephonic appliances* (O.R. IV, 1196, at 1206-8).

Non-Bell Sales.

After 1919, as before, the non-Bell customers of Western made no royalty payment direct to the American Company for the license to use the American Company's inventions embodied in telephonic appliances purchased by them. As before 1919, they continued thereafter to make the single payment to Western to cover the sales price of the item plus royalty and compensation for the value of the inventions of the American Company and of Western embodied therein (R. I, 514-5).

What Dr. Jewett Did.

Dr. Jewett allocated the entire Development and Research expense between the Bell System and non-Bell customers of the Western on the basis of their respective purchases of Western's telephonic appliances (including lead covered cable). His declared purpose was to allocate to the non-Bell field its proper portion of such expense (R. I, 629-30). But this he did not in fact do.

What Dr. Jewett Did Not Do.

Dr. Jewett failed to give effect to the fact that the Bell sales figures used by him in all cases represented retail sales; the non-Bell sales figures used by him for the period 1923 to 1925, inclusive, represented Western's retail sales in the United States and Western's sales to distributors for *resale* abroad; the non-Bell sales figures used by him beginning with 1926 represented Western's *sales to distributors* for resale in the United States and abroad (*supra*, 91).

Dr. Jewett did not give effect to the revenues received by Western from the distributors in addition to the sales price to them for the product sold. Nor did Dr. Jewett give effect to the sales price of the distributors to the ultimate users of the telephonic appliances.

It is, of course, obvious that by including only a portion of the price to distributors on non-Bell sales and the entire retail sales price on Bell sales, the Bell System portion of Development and Research expense is enlarged. Against this enlargement of burden Dr. Jewett failed to offset, as a credit, compensation which Western received from its distributors in addition to the sales price to them for their use and license to permit others to use the American Company's inventions, which compensation was passed on to the American Company through the earnings on the bonus stock given by Western to the American Company for the manufacturing license granted in 1882 and on the American Company's investment in Western (*infra*, 304). Thus:

Graybar Electric Company—1926-1928.

Prior to 1926, Western sold its telephonic appliances to non-Bell customers in the United States through a special department called the "Supply Department," which it had organized in 1922 (but not incorporated), as a separate department of its business (R. VIII, 4532-3), to which Western's Telephone Department, representing the manufacturing end of the business, made sales of its products. In 1926 Western incorporated its Supply Department as the Graybar Electric Company, a wholly owned subsidiary (hereinafter referred to as Graybar), to handle the same busines which it theretofore handled as part of Western (R. VI, 3939-43). For that purpose Graybar re-

ceived an exclusive distributor's license, including therein a license for the purpose of sale, of any "rights to inventions or patents" which Western may acquire in "telephonic appliances"—which rights would of course cover also the American Company's inventions embodied in such appliances. Neither Western nor the American Company received any royalty for such license.

The extent to which Graybar as a distributor was favored in price by Western during the period that Western owned all its stock, may be seen from the following comparisons covering Western's products and those of other manufacturers (R. VI, 3929):

GRAYBAR SALES AND PROFITS—1926-1928
(000 omitted)

	1926		1927		1928	
	Western Manufactures	Other Manufactures	Western Manufactures	Other Manufactures	Western Manufactures	Other Manufactures
Graybar Sales	$12,172	$64,416	$9,020	$59,692	$9,789	$62,913
Gross profit after deducting price paid to manufacturer	$2,708	$9,049	$2,345	$8,553	$2,428	$9,087
% Gross Profit to Sales	22.2%	14.0%	26.0%	14.3%	24.8%	14.4%
Expenses to Sales	12.3%	13.97%	15.0%	13.2%	13.6%	13.3%
Net Profit	$1,204	$21	$993	$640	$1,097	$1,303
Net Profit to Sales	9.9%	.03%	11.0%	1.1%	11.2%	2.1%

Such a striking difference in Gross and Net Profit to Sales, in the face of Graybar's own expense ratio to sales being about the same for Western's and others' business, normally could result only from the fact that Western's prices to Graybar do not cover all the costs covered by the prices of other manufacturers to distributors. But Western made up for the reduced sales prices to Graybar on its manufactures and for the license to use the American Company's inventions without royalty, and for the non-payment to Western for royalty on purchases, by the unreasonably large return which it received on its invest-

ment in that company during the period 1926-1928, inclusive. Graybar's earnings available to Western during the three-year period aggregated $5,534,000, representing an average yearly return of 23.58% on the average Western investment in *capital* and *surplus* in that subsidiary, which return when expressed on the average capital outstanding stock was 27.53% on the average capital (R. VI, 3939). These profits were part of the $47,938,865 cash dividend paid by the Western to the American Company on December 31, 1927 (*supra*, 110).

Graybar Electric Company—1929-1931.

Western transferred to Products in 1927 its Graybar stock. In 1928 Products sold such stock to the Graybar Management Corporation, acting for the Graybar employees (R. VI, 3830, 3834; R. VIII, 4830, 4890).

The purchaser paid for the stock $3,000,000 in cash and 60,000 shares of preferred stock of the par value of $6,000,000, such consideration aggregating in amount the net book value of the physical assets of Graybar (R. VIII, 4890). Appellee claims that no profit was made on the sale (R. I, 366-7).

But as part of the same reorganization, Western terminated the sales agency given to Graybar at the date of its organization. Simultaneously therewith it constituted Graybar as its exclusive sales agent to 1943—and thereafter until terminated by one year's notice—to distribute in the United States outside the Bell System, Western's manufactures of telephonic appliances and certain special commercial products for use outside the telephone field (R. VI, 3943-56).

As part of the same reorganization Graybar agreed to pay to Western out of its "net earnings" as defined in the

agreement 1% thereof for each 1,000 shares of preferred stock outstanding from time to time, but Western was not to stand any of the losses of Graybar (R. VI, 3943-56).

During 1929 and 1930 Western held the following number of shares of preferred stock of Graybar:

1929	60,000
1930	55,000

Under this provision Products received the following:

1929	$1,105,000
1930	318,895*

Western, beginning with 1929, sold its telephonic appliances to the non-Bell users in the telephone field in the United States through Graybar. The record discloses that it is impossible to determine Graybar's sales of Western's manufactures of telephonic appliances (R. VIII, 4802).

The Graybar payments were made to Products, and to the Weco Corporation, a wholly owned subsidiary of Western organized in 1930 to take over the non-operating assets of Products.

In the case of the International Standard Electric as the foreign distributor of Western's products, Western received a cash consideration and a royalty for the grant (*supra*, 111). In the case of the Northern Electric, as the Canadian distributor, Western received a royalty for the grant (*supra*, 112). In the case of Graybar, Western claimed that no profit was intended to be made from the sales of its investment interest in Graybar (*supra*, 123). The participation by Western in the profits of Graybar must therefore be in whole or in part the consideration

*In 1931, adjustments were made which resulted in a credit to Graybar of $11,367 applicable to 1929-30 profit sharing.

for the exclusive sales agency contract of November 1, 1928 (R. VI, 3943-56).*

International Western—International Standard Electric—Northern Electric.

Western sold telephonic appliances for foreign countries other than Canada through two distributors: International Western (1923 to 1925) and International Standard Electric (1926 to 1932), and sold them for export to Canada through Northern Electric (1923 to 1932). How much difference there was between Western's price to its distributors and the retail price, the record does not show. But Western, in addition to the sales price to International Western, received from it unreasonably large current returns on investment to 1925, and large profits on the sale of the business in 1925, representing in part the sales price of the right to use the American Company's inventions embodied in telephonic appliances (*supra*, 109). Western, in addition to the sales price to the International Standard Electric, received large compensation for the grant of the distributor's license (*supra*, 110). Western, in addition to the sales price to Northern Electric, received royalty for the distributor's license, plus an unreasonably large return on its investment in that company (R. VI, 3959).

The suggestion that the profit sharing is in the nature of an investment return because the agreement covering it is printed on the back of the preferred stock certificate can be dismissed with the observation that the same profit participation arrangement was provided for in the original plan, submitted to and approved by the American Company which called for the issuance of $6,000,000 face amount of notes instead of $6,000,000 par value preferred stock (R. VIII, 4852-3; 4830). Certainly preferred stock investment participation in earnings on the basis stipulated in the Graybar arrangement would be a most extraordinarily high price for the common stock to pay for its capital. It is significant that the arrangement in respect to the notes was contained in the Minute Book of the Executive Committee of the American Company which book was not made available until the last few days of the hearings (R. II, 1786) on the ground that Appellants' demand was a "fishing bill" (infra, 202). When this arrangement was finally disclosed it was too late to bring out the facts.

DISCUSSION AS TO CONTENTION NUMBERED IV.

IV:

THE ALLOCATION OF THE BELL SYSTEM PORTION OF THE AMERICAN COMPANY'S DEVELOPMENT AND RESEARCH EXPENSE BETWEEN THE ASSOCIATED COMPANIES, ON THE ONE HAND, AND THE AMERICAN COMPANY'S LONG LINES ON THE OTHER HAND, ON THE BASIS OF PLANT IN SERVICE, UNJUSTLY ENRICHED THE AMERICAN COMPANY BY MORE THAN $20,000,000.

What Appellee Did.

The Bell System portion of Development and Research expenses, allocated as above discussed, was prorated by Appellee among the Associated Companies and the American Company's Long Lines on the basis of plant in service. It determined Chicago's portion on the basis of the ratio of the plant in service in Chicago to the total plant in service in the territory of all the Associated Companies and the Long Lines (R. IV, 2848). The District Court followed Appellee's presentation.

Preliminary Statement.

The amount allocated by Appellee to the Long Lines, to the Associated Companies and to Chicago Intrastate business, and the amount which Appellee should have allocated to each, are (R. IV, 2844; 2848; Appendix, p. 55):

	Long Lines Proportion		Associated Companies (exclusive of Long Lines)		Chicago Intrastate	
	Appellee's Allocation	Appellants' Allocation	Appellee's Allocation	Appellants' Allocation	Appellee's Allocation	Appellants' Allocation
1923	$163,760	$1,432,601	$2,565,579	$1,296,738	$139,476	$ 70,475
1924	180,882	1,667,326	2,784,394	1,297,950	145,247	67,669
1925	200,752	1,990,963	3,201,821	1,411,610	160,036	70,613
1926	235,434	2,273,376	3,894,984	1,857,042	197,747	94,201
1927	321,335	2,627,828	4,861,480	2,554,987	241,935	127,035
1928	359,658	2,590,987	4,929,423	2,698,094	242,605	132,684
1929	512,097	3,507,957	6,226,017	3,230,157	293,601	152,315
1930	833,478	5,429,211	8,427,389	3,831,656	387,281	176,024
1931	822,254	4,791,780	7,833,055	3,863,529	355,295	175,208
1932	Amount not available					
Total			44,724,142	22,041,763		

Discussion.

A.

Appellee allocated pooled expenses of work covering problems having dissimilar application to and dissimilar results on dissimilar operations of dissimilar plants of the Associated Companies, on the one hand, and of the Long Lines, on the other hand.

Considered as a whole, the Bell System furnished the following classes of service through the following agencies during the period of the litigation:

A. *Message Communication*

(1) Local exchange service within cities or exchange areas—Associated Companies exclusively.

(2) Toll Service under 50 miles—Associated Companies exclusively (since 1925) (R. I, 634).

(3) Toll Service over 50 miles—Long Lines and some Associated Companies (R. I, 634).

B. *Telegraph and Teletypewriter Service*

Long Lines almost exclusively (*infra*, 148).

C. *Radio Broadcasting*

Long Lines operates all chain broadcasting; the Associated Companies' operations in this field are practically confined to such as is done in connection with Long Lines (*infra*, 144).

D. *Transoceanic Radio Telephone Service*

Long Lines exclusively (*infra*, 139).

E. *Radio Telephone Service to Mobile Stations*

Long Lines exclusively (*infra*, 140).

F. *Picture Transmission and Photo-Telegraphy Relating to Electrical Transmission of Pictures*

Long Lines exclusively (*infra*, 150).

In respect to items of plant, Long Lines has no telephone instruments, no subscribers' loops, no P. B. X. switchboards, no central offices for handling local business and no interoffice trunks (R. I, 634, 639). It does have toll central offices, lead covered cable and other outside plant similar to that of the twenty-four Associated Companies. On the other hand, the large Associated Companies in their message communication business have practically all the classes of plant that the Long Lines operates (R. I, 641-6).

In respect to the problems of the Bell System, those of the Associated Companies and of the Long Lines are in some respects identical, in some respects similar and in some respects dissimilar (R. I., 721).

In respect to the time of commercial application of the Development and Research work in the Bell System, the results of a large portion of such work found application in the Long Lines plant prior to 1932, and have yet to find application in the plants of the Associated Companies. The results of a large portion of such work which found appli-

cation in the plant of the Associated Companies prior to 1932 found their application first in the Long Lines, and the results of a large portion of the work which has as yet found no application in the plants of the Bell System would find its application first in the Long Lines and later in that of the Associated Companies (R. I., 691, 695).

What Appellee Claimed It Did.

Dr. Jewett testified that all of the work of his department was for the benefit of the Bell System as a whole (R. I, 630; R. III, 2146); that it was impossible to limit the application or result of his expenditures to any one object or any class of property (R. I, 632-3); that money spent to accomplish one result often accomplished two or three others, but not the result sought; and that all the work done should be considered and prorated as a whole (R. I, 629, 630).

B.

Appellee's allocation assumes but does not prove that the allocation on the basis of plant investment of the pooled expenses having dissimilar applications to and having dissimilar effects on the Associated Companies and on the Long Lines will produce a fair result to each of them.

Allocation on the basis of plant investment of pooled expenses of work covering dissimilar problems having dissimilar application to and dissimilar results on dissimilar operations of dissimilar plants, is justifiable only if the percentage of total benefits to each of the participants bears a reasonable relation to the percentage of total expense borne by it—the allocation must bear a fair relation to the realities of the situation (*Smith* v. *Illinois Bell Tel.*

Co., 282 U. S. 133, at 151; *Wood* v. *Vandalia*, 231 U. S. 1). Where the expenditures are for different purposes or have different effects, or apply to different operations, it is obvious that any particular expenditure exclusively for the benefit of the Long Lines, or which benefits it beyond the per cent of such expenditure borne by the Long Lines, must be offset to the Associated Companies, considered as a unit exclusive of the Long Lines, by much greater benefits from other expenses which they receive either exclusively or in excess of the per cent of such expenditure borne by them considered as a unit. To illustrate: In 1930 the Long Lines bore only 9% of the total development and research expense allocable to Associated Companies plus the Long Lines (*supra*, 127); for every $100 of such expense incurred exclusively for the Associated Companies, the Long Lines would be burdened and they would be enriched by $9.00. Similarly, for every $100 of such expense incurred exclusively for the Long Lines, the Associated Companies would be burdened and the Long Lines would be enriched $91. Similar effect is produced where an expenditure incurred for both the Associated Companies and for the Long Lines benefits one or the other in excess of the per cent of expense allocated to each of them respectively. Appellee had the burden to justify the allocation and had the burden to prove its assumption. It attempted to do so by an allocation of the various classifications of Development and Research expense (R. I., 721). It failed in its proof.

C.

Appellee's allocation by classification between the Associated Companies and the Long Lines did not and could not prove the reasonableness of its allocation of the Bell portion of development and research expense between the Associated Companies and the Long Lines.

Appellee showed three classes of expenditures:

CLASS I.

Expenses having present application solely to plant and operations of the Associated Companies.

Appellee claimed that the Development and Research expense of the period 1923 to 1931 inclusive relating solely to the plant and operations of the Associated Companies from which the Long Lines received no benefit ranged from $470,000 to $695,000 per year (Appendix, p. 56).

To the extent that any portion of these expenses were allocated to the Long Lines, the Associated Companies were enriched and the Long Lines were burdened by from $29,000 to $66,000 per year and aggregating for the period $353,678 (Appendix, p. 56).

CLASS II.

Expenses having present application in varying degree to plant and operations of both the Long Lines and Associated Companies.

Appellee claimed that the Development and Research work of the period 1923 to 1931, inclusive, which had present application to the plants and operations of both the Asso-

ciated Companies and the Long Lines in varying degrees involved yearly expenditures ranged from $784,000 to $3,707,000 (Appendix, p. 57).

The burden on the Long Lines from the expenditures of Class I incurred exclusively for the benefit of the Associated Companies represents less than 3% in any year but 1923 and 5.1% in 1923, of the yearly total of expenses in Class II (Appendix, p. 57).

If, therefore, the Long Lines received more than 11.5% as a maximum of total benefit from the total of the expenses of Class II, the enrichment to the Associated Companies at its expense in respect to Class I expenditures would be offset and the Long Lines could have no complaint (Appendix, p. 57).

On the other hand, if the Long Lines received more than such 11.5% benefit, it would be enriched from the allocation of the combined expenses incurred in Classes I and II, at the expense of the Associated Companies.

The difference in effect of burden on the Long Lines resulting from expenses incurred for the exclusive or greater benefit of the Associated Companies on the one hand and of burden resulting from expenses incurred for the exclusive or greater benefit of the Long Lines on the other hand, requires that the Appellee show that the benefits from joint expenditures were sufficiently more to the Associated Companies to justify the greater portion of the joint expenses allocated to them.

Appellee failed in its proof. It merely claimed that the toll equipment in the local companies is "many times the amount of the Long Lines" (R. I, 637); that power equipment is used a great deal more "by the Associated Companies than by the Long Lines" (R. I, 637). It did not claim and failed to show the comparative relation of ex-

pense to benefits in the case of "testing and maintenance equipment" and "miscellaneous" under "Central Office Systems and Apparatus"; of "Other Communication Systems and Apparatus"; of "Submarine Cable"; of "Fundamental Studies"; of "Interference and Preventions."

CLASS III.

Expenses covering Radio Transmission Systems and Wire and General Transmission Systems having present application almost exclusively to the plant and operations of the Long Lines.

Expenses covering Radio transmission system during the period 1923 to 1931 inclusive ranged from $400,000 to $2,000,000 per year and aggregated for the period $9,650,000. Expenses covering wire and general transmission systems ranged from $1,000,000 to $3,500,000 per year and aggregated $26,315,000 for the period. The former class of expenses ranged from 13.47% to 20.9% and the latter class ranged from 26.5% to 40.6% of the total yearly Development and Research Expense (Appendix, p. 58).

RADIO EXPENSE.

Appellee allocated to the Associated Companies 88.7% or $8,563,064 radio development expense for the period 1923 to 1931 inclusive and 7.1% or $687,029 to the Long Lines (Appendix, p. 59). On the record no part of the entire expense is properly chargeable to the Associated Companies.

The following facts prove conclusively that the field intended by the American Company to be covered by the expense was that of the Long Lines and that substantially

all the commercial results of the work applicable to such expense during the period of the litigation had application to the Long Lines; that any incidental benefit which the Associated Companies might have received for this work was compensated for by considerations other than the license payment.

Period to 1923.

(1) As a result of three separate investigations, made in 1915, 1919 and 1922 (R. VIII, 4834-5, 4840, 4817), the American Company had concluded by the end of 1922 that the then existing state of the art and the probable developments in the future, together with the inherent limitations of radio, confined its field of application solely to that covered by Long Lines operations (R. VIII, 4840; R. V, 3252-3).

(2) Similarly by the end of 1922, the actual and foreseeable application of radio as a commercial activity in its limited fields and the position of the American Company and of the Western in the radio industry induced the American Company to undertake, or were relied on by it in undertaking the large development and research radio program from 1923 to 1931, inclusive. Thus:

By the end of 1922 the American Company had obtained a pre-eminent position in radio as a result of its control of fundamental patents in that field covering inventions which had been developed in the course of its reaserch work in wired telephony (R. V, 3350). Principal among these inventions were: vacuum tubes necessary for radio *receiving sets* (R. V, 3507); the inventions and methods required in the construction of *transmitting apparatus* and their use in connection with various circuits; vacuum tubes as oscillators (R. V, 3508); and filters (R. V, 3510-1).

By cross license contracts between the American Company, the General Electric Company on July 1, 1920 (R. V, 3251), and the extensions thereof to include Western, Radio Corporation of America (R. V, 3251), the United Fruit Company (R. V, 3536), the Wireless Specialty Apparatus Company (R. V, 3536), the Westinghouse Electric and Manufacturing Company (R. V, 3251), the American Company was granted (R. V, 3531-3):

(a) the benefit for use in the field of wired and wireless telephony of the patents and patent rights then owned or thereafter to be acquired by them to 1930 having application in the field of radio telephony (R. I, 651);

(b) the benefit of the results of their development and research work having application in the field of radio telephony (R. I, 651);

(c) complete licenses in the field of commercial and public service radio telephony and in the field of wired telephony including its *use in connection with broadcasting* (R. V, 3531); and

(d) the right to manufacture radio telephone equipment for commercial and public service uses (R. V, 3251-2, 3286-7). This right Western acquired (R. V, 3533-4, *infra*, 136).

By the end of 1922 broadcasting as a field of practical application of Radio was in process of development by the American Company (R. V, 3294). In November, 1922, the American Company itself established Radio Broadcast station WEAF, largely for promotion and demonstration purposes (R. V, 3301; R. VIII, 4891). At that time the American Company's development and research expert on radio said:

> "We are watching with large interest the apparently great appeal of radio telephone broadcasting to the

> general public—the difficulties of radio for ordinary telephone work, that is, the spreading out over wide territory and non-secrecy are just the characteristics which are desirable in broadcasting. It may be that here there is a service in which radio telephony can assume considerable commercial importance and much more than justify the large amount of development work which must be given to it'' (R. V, 3596).

By the end of 1922 the American Company's research work had convinced it that further development work would bring about satisfactory results in the two fields of communication where radio telephony was deemed practical, i.e., where radio was the ''only practical system of telephony or where the peculiar difficulties in providing satisfactory wires may render it the preferred system'' (R. VIII, 4840). In the previous year, radio telephone connections had been made to extend long distance conversations to Catalina Island (O.R. VII, 2622).

By the end of 1922, Western had been established as an important manufacturer in the radio industry. On July 1, 1920, Western was granted the right to make use of the licenses granted the American Company by the General Electric in the cross license agreement of July 1, 1920 (*supra,* 135), and thereby became the leading manufacturer of radio receiving and transmitting apparatus for commercial broadcasting (R. V, 3254). By the end of 1922 Western had already equipped or was in process of equipping radio stations. Its sales of radio receiving and radio transmitting equipment in 1922 totaled $1,517,269, (R. IV, 2840-A).

(3) From 1910 to 1919 the American Company's Development and Research expense for Radio was $161,750 (R. V, 3751) out of appropriations of $250,000 for that purpose (R. V, 3751; R. VIII, 4834). From 1919 to the end

of 1922, $1,730,518 (R. V, 3751) was spent on radio development and research instead of $500,000 authorized in 1919 (R. VIII, 4839). But by the end of 1922, although the conclusions as to the limitations of radio in telephone communication were the same as that reached in 1915 and 1919, the American Company's Executive Committee not only approved the excess expenses theretofore incurred but authorized its President to proceed with further development work although advised by him that the

> "scope and expense of such development desirable to undertake in the future will exceed the amounts heretofore authorized by this Committee, and that the exact nature and cost of such as may yet be undertaken can not be accurately foretold" (R. VIII, 4817-8).

Period 1923 to 1931, Inclusive.

The actual results to the Long Lines and to Western from the radio development program during the period 1923 to 1931, inclusive, more than justified their assuming the entire expense of the radio development program undertaken during such period. Thus:

Revenues from Radio Development—Long Lines and Western.

Radio Broadcasting.

Radio broadcasting resulted in the development of networks of telephone circuits for transmitting programs from studios or other places at which they are picked up to the radio station or system of stations from which they are broadcast (R. V, 3169). In the United States wire telephone systems are employed almost exclusively for this national broadcasting (R. V, 3223).

In 1929 over 30,000 miles of program transmission circuits were in use and over 40,000 miles of telegraph wires were used to exercise control thereover (R. V, 3223). These net-works were all served by the Long Lines (R. V, 3224, 3228). Radio broadcasting produced the following commercial results:

(1) The revenue to the Long Lines during the period 1923 to 1930, inclusive, from the use of its wires for broadcasting of programs (after deducting the portion thereof paid to the participating companies) was $10,419,418 (R. V, 3450a), of which amount $9,500,000 was received in the years 1927 to 1930, inclusive (Appendix, p. 60). The figures for 1931 were not available.

(2) Western's sales of radio receiving and transmitting apparatus during the period 1923 to 1931, inclusive, aggregated $18,768,677 (Appendix, p. 60).

(3) Resales by Graybar, 1926-1931, inclusive, of broadcasting equipment manufactured by Western exceeded $4,400,000 (R. VIII, 4891).

(4) Resales were made by Products of input equipment for broadcasting stations manufactured by Western, the amount of such sales not being disclosed on the record.

(5) Western's sales to the Bell System of special telephonic appliances and transmission circuits required to handle chain broadcasting on the large scale developed in the late years (R. I, 660, 659; R. V, 3224, 3343; O.R. VII, 2671). The amount of such sales is not disclosed. The record does show, however, that beginning with 1926 the purchases by the American Company of Western's manufactures other than lead-covered cable jumped by leaps and bounds (R. VIII, 4872). How much was due to broadcasting development and how much to the other developments of Long Lines (*supra,* 127) the record does not show.

(6) Revenues came to Long Lines from message tolls resulting from the popularizing of long distance calling as part of the technique of radio broadcasting. Calls from afar are solicited and received by announcers of radio stations. The large increase in message communication beginning with 1928, coincided with the development of chain broadcasting and caused the American Company to then acknowledge that "the country is becoming long distance minded" (R. V, 3328).

(7) $1,242,000 in royalties was received by the American Company on Western's sales of radio receiving and transmitting apparatus (R. VII, 4149-53; R. VIII, 4640) and from licenses to broadcasting stations (R. VI, 3764).

Trans-Oceanic Radio Telephone Service 1927-1931.

In January, 1927, regular trans-oceanic radio telephone service with London was inaugurated (R. V, 3316, 3321).

By 1931 practically every country in the world was connected to the American Company's Long Lines plant, the important exceptions being Japan, Russia, China, New Zealand and South Africa (R. V, 3342; R. VIII, 4422). On December 31, 1930, there were 35,300,000 telephones throughout the world; 32,200,000 of these were connected to the Long Lines plant of the American Company (R. V, 3342). By the end of 1928 the volume of trans-Atlantic telephone business at times overloaded the radio telephone facilities to such an extent that the American Company considered further facilities were required (R. V, 3329). The American Company took steps to develop and lay a trans-Atlantic telephone cable and to develop more radio channels (R. V, 3328-9). In 1929 there was in service one long wave and one short wave telephone radio circuit between Europe and North America. By 1930 two short

wave circuits were added (R. V, 3325). By 1929 work was going forward on the development and research work of a new trans-Atlantic telephone cable "which will supplement the present radio channels" (R. VIII, 4422). This work continued in 1930 and 1931 (R. VIII, 4422).

Radio Service to Mobile Stations 1929-1931.

Ship-to-shore radio telephone service was established on a commercial basis in 1929 (R. V, 3325, 3169). By the end of 1931 this service was extended to seven ocean liners (R. VIII, 4422). By 1930 there was established a special transmitting and receiving station for this purpose intended not only as a demonstration of the technical features of such a service, but to afford an indication of the extent to which such a service will be used under commercial conditions (R. V, 3170). Radio stations were being installed in 1932 for ship-to-shore service with tug boats and other harbor crafts at Boston, New York, Seattle, San Francisco and Los Angeles (R. VI, 4021-2). Studies were under way in 1929 to determine the practicability of providing a radio telephone service with moving trains (R. V, 3169).

By 1930 installations of Western radio telephone equipment was being made in airport ground stations and airplanes (R. V, 3343; R. IV, 2840a). By the end of 1931 the major part of the air transport routes of the United States, including about 90 airport ground stations and about 250 airplanes had been supplied with equipment for the despatching of airplanes and for the maintenance of two-way telephone communication between the pilots and the airport personnel (R. VIII, 4422).

In this service teletypewriter circuits are furnished by the Long Lines. As of December 31, 1931, about 3,000

miles were used to transmit meteorological information and other communications relating to air transportation (R. VIII, 4422; R. V, 3221).

How much revenue the Long Lines received from service to mobile stations does not appear from the record. How much were the sales of teletypewriter equipment from the Teletype Corporation, wholly owned subsidiary of Western, the record does not show. The record does show that the Long Lines receipts from teletypewriter service furnished other than to the press increased from $3,179,000 in 1929 to $4,679,000 in 1930 (R. V, 3450a), a larger increase than that of any other of the Long Lines' services and comparable only to the increase in receipts from broadcasting (*supra,* 137). The record shows that Western sold $1,240,000 aviation communication equipment in the two years 1930 and 1931 (R. IV, 2840a). The record does not show how much are Western's sales of two-way radio telephone equipments for ship-to-shore, nor the marine radio telephone equipment for harbor crafts such as tug boats, ferry boats, lighters, municipal fire boats, pilot boats and fishing crafts (R. V, 3249).

Profits from Radio Development to Long Lines.

As bearing on the question of the extent to which the Long Lines prospered during this period and the extent to which these services contributed thereto the following *undisputed* facts are significant:

From 1923 to 1926, inclusive, the Long Lines' average depreciated investment in fixed capital increased 42% from $92,000,000 to $131,000,000 (R. VIII, 4406). Yet the per cent return on such depreciated investment of the Long Lines compares with the per cent return on corresponding

investment for all Associated Companies, was (R. VIII, 4405-6):

	Long Lines	Assoc. Co.
1922	21.0	7.24
1923	20.0	6.73
1924	17.7	6.46
1925	19.5	7.16
1926	17.8	7.71

The period of major radio development, beginning with 1927, is even more spectacular from the standpoint of Long Lines' earnings. Long distance message telephone rates were reduced $3,000,000 on December 1, 1926 (R. V, 3317), $1,500,000 on December 1, 1927 (O.R. VII, 2680), $5,000,000 on February 1, 1929, and $5,000,000 on January 1, 1930 (R. V, 3220). This represented an average cumulative yearly reduction in 1927 of $3,000,000, or 4.4 per cent of message revenues; in 1928, $4,500,000, or 5.4 per cent of message revenues; in 1929 $9,500,000, or 10 per cent of message revenues; and in 1930, $14,500,000, or 15 per cent of message revenues* (R. V, 3450a, 3450b).

During the same period the Long Lines average depreciated investment in fixed capital was (R. VIII, 4406):

		Per Cent of Increase Over 1926
1926	$131,000,000	
1927	158,000,000	20.6
1928	188,000,000	43.5
1929	236,000,000	80.2
1930	314,000,000	139.7

But in the face of the voluntary reduction in rates ranging from 3 per cent to 15 per cent of the total message revenues and in the face of the increase in investment ranging

*In 1931 the four reductions represented an annual estimated savings to long distance service users of $20,000,000 (R. V, 3220).

from 20.6 per cent to 139.7 per cent during the period, the per cent return on depreciated investment in fixed capital was (R. VIII, 4406):

1926	17.8
1927	15.1
1928	15.8
1929	14.6
1930	9.3

In viewing 1930, it is significant that the teletypewriter and broadcasting revenues increased 50 per cent and 25 per cent respectively over the previous year, whereas the other services either showed a decline or made only slight gains over 1929 (R. V, 3450b).

The above showing compares with the following showing of the Associated Companies on depreciated investment in fixed capital (R. VIII, 4403):

1926	7.71
1927	7.45
1928	7.81
1929	7.84
1930	7.03

The full significance of the comparison between the showing of the Long Lines and of the Associated Companies requires consideration of two facts:

(1) the Long Lines plant investment is built in advance of and to provide for increasing business *five years ahead of construction* (R. III, 2211).

(2) the increase in depreciated investment in fixed capital of the Associated Companies as follows:

		Per Cent of Increase Over 1926
1926	$1,985,000,000	
1927	2,150,000,000	8.3
1928	2,345,000,000	18.6
1929	2,562,000,000	29.0
1930	2,818,000,000	42.0

was not as rapid as that of the Long Lines (*supra*, 142).

The comparison between the rate return of the Long Lines and of the Associated Companies on their respective equity investment (capital and surplus), shows the difference in their relative earning position (R. VIII, 4395-6):

	Associated Companies	Long Lines
1923	6.90%	18.95%
1924	7.37	16.99
1925	7.51	19.70
1926	7.87	17.17
1927	7.88	14.27
1928	7.91	14.66
1929	8.00	13.53
1930	7.70	8.51

From the above facts, Appellants conclude that the actual results to the Long Lines from the radio development program during the period 1923 to 1931, inclusive, more than justified its assuming the entire expense of the radio development program undertaken during such period. Any doubt in this respect is removed when consideration is given to Western's earnings from the same development which are discussed *infra*, 304.

The alleged present and prospective commercial benefits to the Associated Companies from the radio development program are admittedly highly speculative and have been and will be adequately compensated for through ways other than by the license payment. Thus:

Revenues from Radio Development—Associated Companies.

Radio Broadcasting.

The Associated Companies could receive revenues for the use of their facilities in connection with broadcasting from two sources: one from their own subscribers and second from the Long Lines. The record is not complete

on either phase of this business but certain facts are significant. Appellee was represented to have many broadcasting stations as its own customers in Chicago, which next to New York is the largest of such radio centers in the country (R. V, 3304, 3328, 3169). But the record shows that Appellee's revenues from the use of its facilities in connection with broadcasting other than in conjunction with the Long Lines operations were negligible, aggregating for the period 1923 to 1930, inclusive, $98,615 (R. VIII, 4450a). The Long Lines' revenue for the use of its wires in long distance, above stated, are *after* deducting from the gross receipts $2,522,080* (R. V, 3450a-b). In other words, the Associated Companies' share from the gross revenues from chain broadcasting, which was intended to be the mainstay to support radio development expenses, was less than 20%, although they bore over 90% of the radio development and research expense (*supra*, 127).

Trans-oceanic Service and Service to Mobile Stations.

These services are not furnished by the Associated Companies.

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*Whether such deduction represents the portion paid to the Associated Companies as their share for participating in furnishing facilities, exclusive or inclusive of the amount paid Appellee under its special arrangement the record does not show. Assuming that the deductions of $2,522,080 from gross receipts do not cover Appellee's special arrangement, a deduction should be made for the additional amount, if any, which the Long Lines paid to Appellee for the operation of the Long Lines' plant under such special arrangement which the Long Lines would not have been required to pay if the broadcasting services had not been furnished through such plant. The record does not show that amount. But the record does show the return which Appellee received in Chicago from its interstate services, including the Long Lines service, and from its own services. Neither showing indicates that Appellee could possibly have benefited in Chicago either from the use of its facilities in connection with radio broadcasting, or from message communication resulting therefrom (Appendix, p. 124).

Future Use of Radio.

Dr. Jewett testified that the work on wires for use particularly in radio broadcasting has proceeded to a point where it is possible that something might develop therefrom in the future that might be useful in *new plant*, both in the fields of the Long Lines and the Associated Companies to make possible the use of the same wires for telephone communication and for music transmission, which is now hardly possible to do (R. I, 661). As to such, Dr. Jewett testified (R. I, 661-2):

> "Looking at the time ahead, I should say there is relatively more use in the plant of the associate companies than in the plant of the Long Lines. Of course, you will appreciate that I am having to project myself somewhat into the future, but I am doing it because of my knowledge of the inherent characteristics of this new thing which has only recently come clearly into our art, and it is of a character which makes it available for use over distances which are such that it will be a substitute for existing types of plant now employed very largely by the associate companies and also by the Long Lines."

This claim is subject to the following limitations:

(1) If, when and as the discovery reaches the stage of practical application, it will be in the new plant of the Long Lines and of the Associated Companies. What ratio of one to the other will then exist no one knows or can now tell. As to whether it will be of more benefit to them than to the Long Lines is pure guess. Even if such guess be sound, the extent of the additional benefit is of course pure speculation and was not even guessed at by the witness. Without knowledge of such extent, the reasonableness of the greater allocation of expense to the Associated Companies cannot be determined.

(2) If, when and as the discovery reaches the stages of practical application, it will require new plant, i. e., new business for Western and profits to the American Company as the equity investor thereof and as the owner of 183,675 shares of bonus stock given to the American Company as part consideration for the manufacturing license covering products sold to the Bell System (*infra,* 168).

(3) The use of the discovery in the new plant requires that the Associated Companies use wires which are "three times as good as the ordinary telephone circuit" (R. I, 660). By so doing the standard of efficiency of the plant for telephone service is raised beyond the degree necessary for that service (*infra,* 164).

Dr. Jewett further testified that experiments in ultra-short wave radio have developed a cable structure to be used in the *future* if the cost thereof will permit, to provide channels for radio transmission, plus telephone, plus telegraph, plus music sound transmissions (R. I, 658) and that if, when and as developed it could be used in the plant of the Associated Companies (R. I, 659).

This claimed future benefit to the Associated Companies as a basis for justifying the allocation as made by which the Associated Companies bear more than 90% of the cost of the entire radio development is subject to the same objections just stated against the similar use of proposed wire construction (*supra,* 146) and for the reasons already stated, this claim must fail.

WIRE AND GENERAL TRANSMISSION SYSTEMS DEVELOPMENT EXPENSE.

Telegraph Transmission Equipment and Methods Related to Telegraph and Teletypewriter Services.

The work in this field relates to the various classes of telegraph and teletypewriter services furnished almost exclusively by the Long Lines. The total of the Development and Research expense included in the classification of Wire Transmission System which is specifically identified to cover work relating to these services for the period 1923 to 1931 was $2,130,243 (Appendix, p. 61), of which more than 90% was charged to the Associated Companies.

Although the American Company handles practically no commercial telegraph business, it furnishes a large mileage of telegraph circuits for the private use of individuals and institutions and for the use of Governmental Departments (R. V, 3168-9). Since 1914, the Long Lines has provided telegraph circuits to the newspaper and press Associations (R. V, 3168, 3220). Since 1924, this service has been broadened to include banks, stock brokerage houses, bond and security houses, and other financial institutions operating over large areas as the Federal Reserve Board, and industries where branch offices are located in different cities (R. V, 3220, 3228). As already noted, the airways are universally equipped with this service (*supra*, 140).*

*Prior to 1928 the greater part of such telegraph circuits were operated by highspeed Morse telegraph. Since that date telegraph printers or teletype machines have come into use (R. V, 3168). In 1923 Western made arrangements with the Mokrum-Kleinschmidt Companies to manufacture printer apparatus for the Bell System. But the American Company and Western both had developed inventions in that art and in 1923, the American Company and Western licensed the Mokrum Company the use of certain of their respective patents, inventions and ap-

The Long Lines revenues received from the telegraph and teletypewriter services aggregated for the period 1920 to 1922, inclusive, $22,901,495, and for the period 1923 to 1930, inclusive, $104,973,663 (Appendix, p. 62; R. V, 3450a-b). The figures for 1931 are not in the record.

The growth in revenue from these services kept pace with the growth in revenue from message tolls during this period. In 1922 the Long Lines' revenues from these services represented 24.8%; in 1930, 26% of revenues from message tolls (R. V, 3450a-b).

On the other hand, Appellee's revenues from telegraph and teletypewriter service to its own subscribers for the entire period 1923 to 1930, inclusive, aggregated $43,400 (R. VIII, 4450c).

The amount which the Associated Companies received during the same period from the Long Lines for these services was $29,000,000 (R. V, 3450a-b) or 22% of the total revenues from the services, although the Associated Companies were charged more than 90% of the development and research expenses applicable thereto (*supra*, 127).

Future Use of Teletypewriters.

Appellee claimed that because of recent developments the potential use of teletypewriters is in the field of the Associated Companies (R. I, 712). Appellee failed to point out that the future service was also in the long dis-

plications relating to printing telegraph apparatus and systems listed in the contract (R. VIII, 4851) and received in return a license to use the Mokrum Company's patents, inventions and applications without royalty if the latter did not supply the orders of the Western for apparatus for use in the Bell System (R. VIII, 4851). But the American Company retained the inventions on ciphering and deciphering systems developed by the American Company's Department of Development and Research. This relationship continued to 1930 when the American Company purchased the stock of Teletype Corporation, which took over Mokrum Company and Mokrum-Kleinschmidt Company, and as part of the same transaction sold it to Western (R. V, 3220; R. VIII, 4833, 4859).

tance service (R. V, 3224); that such future service contemplates the use of apparatus manufactured by the Teletype Corporation, and that the method by which Western acquired the Teletype Company already capitalized in 1930 for at least $15,000,000 the future earnings of this branch of the business on which the Associated Companies must provide a return* (R. I, 459).

Picture Transmission and Photo Telegraphy Relating to the Electrical Transmission of Pictures.

The work in this field relates to the service for the electrical transmission of pictures, which was inaugurated in 1925, and is furnished exclusively by the *Long Lines* (R. V, 3169, 3218, 3223, 3328).

The total of the Development and Research expense which is specifically identified to cover work relating to this service was $1,194,791 (Appendix, p. 62), of which more than 90% was charged to the Associated Companies.

By 1924 the method had been developed for electrically transmitting photographs, drawings, handwriting, finger prints, etc., over telephone circuits. The first public demonstration was made in May, 1924 (R. V, 3304). The service was established on a commercial basis between the cities of New York, Chicago and San Francisco in 1925 (R. V, 3169). In 1926 the service was extended to include also Los Angeles, St. Louis, Cleveland, Boston and Atlanta (R. V, 3316).

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*The American Company exchanged in 1930 $15,000,000 par amount of its stock for the entire capital stock of the corporation owning the Teletype Corporation business and as part of the same transaction sold the Teletype Corporation stock to Western for $30,000,000 (R. I, 459). Western carried the investment on its books at the purchase price and revised the balance sheet of Teletype Corporation to give effect thereto by adding an item of goodwill of $23,813,000 (R. I, 460; R. V, 3693-4).

Pictures may be sent from any of the above cities to one or more of the other cities which are reached by this service. Newspapers use this service for the transmission of pictures. The service is also used to transmit pictures of legal documents, advertising material to be simultaneously released at a number of separate points, pictures showing new styles in ladies' wearing apparel, personal greetings in the handwriting of the sender and finger prints of criminals. By arrangement with the American Company in 1928 (R. V, 3328-9) the Western Union and the Postal Telegraph Companies accept telegraph messages for "facsimile" transmission over the Long Lines Picture System between those cities which the system reaches (R. V, 3169).

The record does not show the Long Lines' revenues for this service. When originally put into use the American Company considered "that it seems probable that it may result in a considerable service which will utilize our circuits at times when they are not required for regular telephone service" (R. V, 3304). But certainly no part of the Development and Research expense in this field should be allocated to the Associated Companies.

CARRIER TELEPHONE EQUIPMENT AND CIRCUITS.

The total of the Development and Research expense which is specifically identified to cover this work was $1,558,254 (Appendix, p. 63) of which more than 90% was charged to the Associated Companies.

By the use of the Carrier System, a number of independent telephone conversations are simultaneously carried by a single pair of wires (R. V, 3322). The Carrier System was first applied in 1918 in the Long Lines (R. I, 666). It

has application to open wire construction and became a substantial factor in providing for the growth of the longer haul facilities of the Long Lines, for distances exceeding 250 to 300 miles (R. V, 3218). To 1923, Carrier telephony was used substantially only on the Long Lines and on the very long lines of the Associated Companies (R. I, 666). After 1923, the System was developed to a point where its application became possible on shorter length open wires which increased its value to the Long Lines and also extended its use to the Associated Companies (R. I, 666). This Carrier development reduced the cost of rendering long distance service and contributed towards making possible the toll message rate reductions in 1926-27 (R. V, 3218). After 1924, the Long Lines withdrew from the field of message communication between distances less than 40 miles, and transferred its facilities within that field to the Associated Companies (R. I, 672). Later developments of the art have tended to shorten the length of wire to which application of the carrier art may be made but at the present time the uses thereof are confined to toll lines (R. I, 727).

The application of the carrier art to telephony covered by the above expenses relates solely to *open wire* structures, and is therefore confined to country where open wire construction is chiefly employed as in the West and in the sections of scattered traffic (R. V, 3218).

It would, therefore, have as yet little or no application to the Chicago Area and to the sections of heavy traffic where *toll cable* has replaced open wire construction (R. V, 3218). The application of the carrier art to cables is still in the experimental stage (*infra*, 153).

It should also be borne in mind that even on the American Company's claim, the benefit to Long Lines during the period under investigation from this development is far in

excess of the ratio of total benefit therefrom to which it is entitled by virtue of the small portion of the expense having allocated to it (R. I, 687). Furthermore, the increase in use by the Associated Companies must come as a result of improvements "which increase the efficiency and decrease the first cost and operational cost of the equipment." By so doing, therefore, the Development and Research work in this field will increase the potential field for the products of the Western, from which operations the American Company will receive increased returns on its investment in the Western on the 183,675 shares of Western stock which it now owns and which represents the bonus stock given to the American Company for the license it gave to Western to act as the manufacturer for the Bell System (*infra*, 168).

CARRIER ON CABLE.

The total of the Development and Research expense which is specifically intended to cover the application of the carrier art to cable in 1930-1931 was $1,552,405 (Appendix, p. 63) of which more than 90% was charged to the Associated Companies.

This work relates to the attempt to apply to cable wires the carrier art which as already noted (*supra*, 151) had been successfully applied to open wire structures. The work has not gone beyond the experimental stage. The American Company's witness expressed an opinion (R. I, 668):

> "That this development will have a very considerable field for use in the future in all the companies, that is, both in the plants of the Long Lines and the plants of the Associated Companies. As to the exact ultimate length of circuits over which it may be ap-

> plied, I cannot, of course, say with exactitude, but I have no reason to doubt that the field of its first application will be on circuits of inherently short lengths."

This last sentence was to overcome the consideration that carrier telephony as applied to open wires had first application in Long Lines.

Assuming that the application of the carrier art to cables will be in short lengths so as to include also the Associated Companies, there is nothing in the record to indicate that, if, when, and as applied, this new art will benefit at such time the Associated Companies and the Long Lines in the same ratio as the ratio of expense allocated to them respectively —i. e., more than 90% to the Associated Companies and less than 10% to the Long Lines. It is impossible to determine whether such application will have general application through all the Bell System, so as to make the allocation on the basis of plant investment between the Associated Companies and Appellee fair. It is impossible to determine whether such application will have application within the Chicago area in the exchange plant and in the toll plant in the same ratio as that used to allocate the license payments in 1930 and 1931 between the intrastate toll and exchange services. And, of course, it is impossible to determine the extent to which such development will find application in the field of telephony from which the Long Lines alone benefit.

TELEVISION.

The total amount of Development and Research expense specifically identified as covering the work in this field from 1926 to 1931, inclusive, was $674,990 (Appendix, p. 64) of which more than 90% was charged to the Associated Companies.

The American Company said in its Annual Report for 1928 (R. V, 3329):

> "Television was first demonstrated by the Bell Telephone Laboratories in 1927. In 1928, further progress was made and a new transmitting device which is capable of putting upon the television circuit outdoor scenes was developed. Work on television with the idea that it might ultimately be supplemental to the telephone is being continued.
>
> The Bell Telephone Laboratories have scientific knowledge that would enable them to set up circuits which could carry instantaneously the human voice and the human sight around the world, but how to make this economically practical is yet to be devised. Progress will undoubtedly be made by a gradual extension of the present units."

In its Annual Report for 1930, the American Company said (R. V, 3343):

> "Scientific progress in television was marked by a demonstration of two-way television and speech over wires. It was impressive in showing what it is possible to do in the present state of the art in eliminating distance in sight and sound. The equipment however, remains necessarily complicated and expensive, requiring expert attention and larger units of apparatus. The commercial possibilities of television are still uncertain."

These statements tend to confirm the tendency which was found in the case of every new service development from the Development and Research work; that is, the new service finds first application in the Long Lines, and then perhaps in the toll service of the Associated Companies and finally perhaps in their exchange service. Such is the history of radio, of picture transmission (*supra*, 150; R. I, 712), of the use of wires in connection with broadcasting (R. I, 712). On the basis of the American Company's al-

location, the Associated Companies bear all but a minor portion of the Development and Research expense instead of the Long Lines; and the Exchange service bears all but a minor portion of the Associated Companies' portion. Certainly such basis of allocation enriches the Long Lines and toll branches of the business at the expense of the Exchange service customers. Moreover, Television, if, when and as it reaches commercial application will require circuits of different character than ordinary telephone circuits (R. I, 659). This means additional business for Western to provide additional profits to the American Company.

VACUUM TUBES.

The total amount of Development and Research expense specifically identified as covering the work in this field was $2,539,024 (Appendix, p. 64) of which more than 90% was charged to the Associated Companies.

Vacuum tubes found their first application in the Long Lines wire plant as telephone amplifiers or repeaters (R. I, 663). They made possible the extension of long distance service over large areas beginning with the transcontinental line in 1915 (R. I, 671). Vacuum tubes found application in and made possible the development of carrier telephony and telegraphy (R. I, 669), the former development being largely, and the latter development almost entirely Long Lines activities (*supra,* 148). Vacuum tubes found application in the whole field of radio (R. I, 669). The strategic patent position of the American Company through control of the vacuum tube enabled it to bargain for and to procure the licenses already enumerated from the General Electric Company and others in the radio field (*supra,* 135).

Vacuum tubes found application and are the heart of the talking motion picture development and of the reproduction of sound from records (R. III, 2164-5; R. VIII, 4715).

The American Company claimed that the field for use of vacuum tubes as amplifying devices has been extended to the Associated Companies plant and will be extended still more as improvements are made in the future in the vacuum tubes and their cost reduced (R. I, 669-672). It points to the history of the last ten years. By 1921 there were about 1000 repeater installations in service practically all of which were in the plant of the Long Lines. By 1925 that usage had grown to approximately 7,500, of which about one-third were in the plants of the Associated Companies. By the end of 1930, the total number had grown to 81,500, of which still about one-third were in the plants of the Associated Companies and two-thirds were in the plant of the Long Lines (R. I, 671).

Appellee's allocation distributed the $2,539,024 expense covering work on vacuum tubes between the Associated Companies and the Long Lines on the basis of $2,252,114 to the former and $180,271 to the latter. But the Long Lines, the American Company and the Western were the beneficiaries of all or of substantially all of the vacuum tube development in all of these fields (*supra,* 135), the share of the Long Lines alone being more than sufficient to justify its payment of the entire cost of such development (*supra,* 137, *et seq.*). The benefit to the Associated Companies is off-set by the use of their exchange property in long distance service (*infra,* 164).

VOICE FREQUENCY—CROSS INDUCTION GENERAL AND MISCELLANEOUS.

The total Development and Research expense specifically identified as covering the work in these fields was $6,648,505 (Appendix, p. 65), of which more than 90% was charged to the Associated Companies.

Insofar as the work done which was covered by the heading "General and Miscellaneous" had application to the work, the allocation of the expense of which is in issue as above analyzed, the allocation of General and Miscellaneous expense should follow the allocation of the expense of such other work in the manner hereinabove urged by Appellants.

As to the balance, if any, of expense covered by the heading "General and Miscellaneous" and by the heading "Voice Frequency" and "Cross Induction," the record does not disclose the nature of the work other than that it is of a fundamental character and for the period 1923 to 1931 found application first in the Long Lines (R. I, 725). Nothing appears to indicate what portion, if any, had application in the Associated Companies' plant and operations—certainly not to the extent of bearing any relation to the per cent of expense allocated to the Associated Companies and to the Long Lines (R. I, 725, 717).

Transmission—that is, the ability of the subscriber to carry on conversation—has been one of the principal problems of the long distance service since the beginning of the new license contract arrangement in 1919 (R. I, 693); and development during this period of a transmission character found their first and largest application in the plant of the Long Lines (R. I, 695).

By 1919 the developments to create and to provide for the extensive and intensive use of the long distance service, involved (a) the increase in the number of circuits without increasing the number of open wires through the use of phantom circuits and carrier current systems; (b) the extension of the radius of long distance communication through the use of amplifying devices, such as repeaters; and (c) increase in the number of wires through the use of cables (R. V, 3353).

The first transcontinental Long Lines circuit was completed in 1915 (O.R. VII, 2640), the second in 1923 (R. V, 3302); and the third in 1925 (O.R. 2658; R. V, 3310). These transcontinental circuits made use of open wire and carrier circuits (R. V, 3162-3), and only to a limited extent cables. The limitation in the use of cables for long haul business was due to the transmission problems involved. The extension of the use of cables for long haul service has featured the period from 1918 to 1932. The extension has appeared slow but in accomplishment has been outstanding owing to the difficulties in transmission which it was necessary to overcome.*

The use of cable for very long circuits made necessary a higher grade of transmission over them (R. V, 3336); the improvement in the quality of transmission required the solution of many scientific problems (R. V, 3295-6), and "required an entirely new adaptation of physical principles many of which are themselves new and therefore applicable only in the hands of those who are highly trained" (R. V,

*At the end of 1919 the American Company said:
"Cables in long distance lines have always greatly limited the distance through which speech may be transmitted but as the increase in the number of long distance wires has made necessary the employment of increased lengths of long distance cable, the technical difficulties in the transmission of speech through such circuits have seemed at times to be almost insurmountable" (R. V, 3353).

3336). Some of the problems presented by the use of long circuits in toll cables arise from the variations in the temperature of a circuit, the slowing up of the travel of sound waves over cable circuits compared to open wire circuits, the echo effect produced by the voice wave travel over cable circuits, the difference in the echo effect produced by the fact that the transmission delay is not the same for sound waves of different frequencies, and the interference with conversation due to the delay which is added to the ordinary time elapsing between question and answer (R. V, 3162-4). These problems have been solved for toll cable construction of different lengths and such construction has gone forward (R. V, 3164),* but continued Development and Research work was, during the period, and still is, necessary to make possible the extension of cable circuit construction, not only for transcontinental service, but for international connections (R. V, 3165).

Another source of transmission problems of Long Lines service which was partially solved during this period and still awaits full solution is the use of wires for broadcasting on a national scale. The circuits used for broadcasting during the period to 1932 were open wires, but the quality of transmission required to transmit music from broadcasting stations was much higher than for ordinary telephone conversations over open wires (R. I, 660). The ordinary telephone circuit therefore could not be used for that purpose; and interconnecting circuits for broadcasting on a national scale required special design, construction, maintenance and operation to give good transmission results over the wide range of frequencies used in broadcasting (R. V,

*By the end of 1918 the Long Lines toll cable extended from Boston to Washington and to Philadelphia. By the end of 1919 it was extended to Harrisburg, Pennsylvania (R. V, 3353); by 1923 to Cleveland, Ohio (R. V, 3302); by 1925 to Chicago, Illinois (R. V, 3310); and by 1932 to St. Louis, Omaha and Kansas City (R. VIII, 4422).

3343; R. I, 660).. As the importance to Long Lines of radio broadcasting revenues increased, the Development and Research department undertook the solution of the problem required to replace open wire circuits by cable circuits for use in radio broadcasting. By the end of 1930 progress had been made by the Department overcoming the scientific problems involved and had reached the stage of designing new cable circuits which could handle the broadcasting as well as the open wire circuits (R. V, 3343). In 1931 study was continued in respect to wide frequency band transmission over cable (R. VIII, 4423), broadcasting using such bands (R. V, 3343).

Another source of transmission problems came from the extensive use of repeaters in the long distance circuits. Such use involved the danger of "cross talk" between circuits and required Development and Research work for the proper arrangement of repeaters, of the separate circuits and of groups of circuits as a whole (R. V, 3597).

The record discloses no particular transmission problems involved in the exchange portion of the plant other than those involved in the handset, which the American Company has designated as exclusively an exchange problem (R. I, 681). But this problem has not been included by the American Company under the sub-heads now being considered Nor does the record show any other transmission problems of the Associated Companies which required or received solution during the period under investigation.

We conclude, therefore, that the Development and Research expense covering the items of Voice Frequency—Cross Induction—General and Miscellaneous should be considered all as exclusively for the benefit of the Long Lines.

D.

The American Company was unjustly enriched by Appellee's allocation, approved by the District Court, at the expense of the Associated Companies for the period 1923 to 1931, inclusive, by an amount in excess of $20,000,000.

For the reasons already given, the Development and Research expense included in the classifications—Wire Transmission Systems, General Transmission Systems and Radio Transmission Systems—should be considered exclusively Long Lines expense, in the aggregate amount of $26,312,029. Of this amount $23,338,770 was allocated to the Associated Companies (Appendix, p. 58), and to that extent the American Company Long Lines has been enriched at the expense of the Associated Companies.

As already noted (*supra,* 131) the maximum enrichment of the Associated Companies at the expense of the Long Lines for Class I expenses, was $353,678, on the assumption that this Class of expense is exclusively for the benefit of the Associated Companies.

As already noted (*supra,* 131) the Class II expenses are claimed by the American Company to be for the joint benefit of the Long Lines and the Associated Companies; but the record does not disclose that the ratio of benefits between the Long Lines and the Associated Companies bears any relation to the ratio of expense between them. On the most favorable assumption for Appellee that from Class II expenses the Associated Companies benefit nine times as much as the Long Lines the unjust enrichment to the Long Lines from the allocation of Class I and III expenses combined was a net amount in excess of $20,000,000.

Appellants submit, however, that the unjust enrichment to the Long Lines of $20,000,000, is the minimum enrichment. Appellants deny that the Class I expenses are exclusively for the Associated Companies and that Class II expenses can be divided in the manner above stated (*supra*, 131).

The exchange property, that is, the property used by the customer at the subscriber's station and from that station to the long distance switchboard or to the toll trunks when used in connection with the long distance switchboard, is used as the terminal facilities by the Long Lines in furnishing its long distance service (*supra*, 54).* The same property is used also as the terminal facilities by Appellee and the other Associated Companies in furnishing their own local exchange services. To render satisfactory long distance service every portion of the facilities used in that service, including the terminals, must have the standard of efficiency set up for such satisfactory service. Similarly, to render local exchange service every portion of the facilities used in that service including the terminals must have the standard of efficiency set up for such satisfactory service. *If the efficiency of the terminals is established on the same standard for use in the exchange service and in the long distance service,* it is obvious that:

(1) the maintenance or improvement or degradation of the efficiency of the terminals for use in the one service will constitute the identical maintenance, improvement, or degradation of the efficiency of the terminals for use in the other service;

*To make the analogy of a long distance call and travel over a railroad comparable, we must assume that the owner of a private car in Chicago leases the starting apparatus, the entire track from Chicago to New York, the terminal facilities necessary to the operation of the entire track, plus the apparatus necessary to stop the car in New York—all for his exclusive use during the entire period when the private car travels to New York and back to the starting point in Chicago.

(2) nothing can be done to affect the standard of efficiency for the one service which will not affect the standard for the other service;

(3) the same result follows, whether the standard is viewed as the standard for use in the exchange service only, or is viewed as the common standard for both. Significance does not attach to the view that the standard of efficiency of the exchange property is the standard for use in exchange service only, or that it is the standard for use in that service and in the long distance service.

Significance attaches to the historical facts that

(1) the American Company originally established the efficiency of the exchange property for use in exchange service alone at the higher *level* of the standard required to permit the Long Lines to furnish long distance service at the standard established for the latter service (R. I, 700, 739-40; O.R. VII, 2499, 2670);

(2) as the American Company raised the standard of satisfactory long distance service, it conformed the standard of efficiency of the exchange property to accomplish the raised standard; thereby automatically raising the standard of efficiency of the same property for use in the exchange service.

In the regular course of its business the American Company has said that the long distance service requires a higher standard of maintenance of plant than local exchange service:

> "Every exchange line is a long distance line; every exchange station is the center for that station, of the entire Bell System" (O.R. VII, 2524).

The standard of the long distance service determines the standard of maintenance of the entire exchange plant used in all services. The American Company so proclaimed.*

*"Limited local service can be given by a plant that would be useless in a comprehensive system made up of local exchanges and toll,

The first transcontinental line in 1915 was the result not only of the developments of the vacuum tube, the loading coil, and the repeater which were in Long Lines plant but also "through comprehensive improvements and refinements in line switchboards and all the instrumentalities employed" (R. V, 3222).

From these historical facts it follows that action taken to maintain the standard of efficiency of such exchange property for use in the exchange service at the level of the standard set up for satisfactory long distance service, benefits the Long Lines whether action is viewed as taken to maintain the level of the standard for exchange service only, as the Appellee's witnesses view it for the purpose of this case, or whether the action is viewed as taken to maintain the standard to give both classes of service, as the American Company views it in the regular course of its business, and as Appellants maintain is the proper view to take.

An illustration of the effect of this policy appears in the development of the receiver and transmitter. When long distance service was established in Chicago in 1893, it was necessary to use special telephone receivers and transmitters for that service as the instruments used in the exchange service were not satisfactory to meet the transmission requirements for the extended service (R. I, 700). Then the instruments used in long distance service became

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and particularly in connection with long distance service. Although 90% of the connections are purely local, the 10% that are not local are more important * * * and must be equally available through one station equipment. For that reason the Bell plant must be maintained at a higher standard than would be necessary if it were a purely local exchange service" (O.R. VII, 2499).

"In the telephone business the apparatus used is of a highly intricate, technical and complicated character. Therefore to make possible satisfactory communication between individuals in the same town or city, or between individuals located in places either near or far apart, it is necessary that the apparatus at both ends and throughout the length of the line be of certain standards and of the highest quality" (O.R. VII, 2670).

standard for that service and for the local service, thereby raising the standard to that of the long distance service. The development of the instruments since the early days has been along the same lines.*

An analogous situation relates to the circuits now used for radio broadcasting, which are three times as good as the ordinary telephone circuit (R. I, 660-1). If and when new circuits are developed to provide interchangeable telephone communication and music transmission, the standard will be the same for telephone communication and music transmission but the standard for both will be that of the higher level necessary to permit music transmission (R. I, 712-3).

Under those circumstances whether one views the standard as that of telephone communication or of that plus music transmission, the telephone service has been burdened to *benefit* the music transmission service.

We conclude therefore that a portion of the Class I expenses which the American Company claimed to be

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*Dr. Jewett testified:

"The whole basis upon which the Bell System has been built up (and, so far as I know, it is a basis which has carried over into all American telephony) was that the transmitter and the receiver (which are the dynamo and the motor, if you will, of the electrical communication system) should be each of the highest possible efficiency, and uniformly at that high efficiency. The whole urge has been always, over the entire history of telephony in this country, to increase the efficiency of the transmitter and the receiver. As these efficiencies were increased, so that you had more energy given out and less energy required at the receiver, they have resulted in an extension of telephony, because it has been possible by those means to go farther with a given size of connecting wire plant, or to cheapen the wire plant by making it smaller for a given distance.

"Now, the result of that long course of rigid adherence to a principle was to build up a vast local intercity and interstate communication plant which required the high standards of transmission and reception of the transmitter and receiver and all plant was engineered on the basis that those high standards were in the plant (R. I, 698-9).

"That service had been engineered to a point when the phone on one's desk must be one that could be used either in local service or a call to New York City" (R. I, 699-700).

exclusively Associated Companies' expense in fact benefits the Long Lines. Such benefit more than offsets any incidental benefit to the Associated Companies from the work covered by the Class III. expenses. Appellee's allocation of Development and Research Expense unjustly enriched the Long Lines by an amount in excess of $20,000,000 at the expense of the Associated Companies, including Appellee.

DISCUSSION AS TO CONTENTION NUMBERED V.

V.

THE ALLOCATION TO THE LICENSE CONTRACT PAYMENT OF THE PORTION OF THE AMERICAN COMPANY'S DEVELOPMENT AND RESEARCH EXPENSE APPLICABLE TO IT AS THE HOLDING COMPANY INVESTOR IN THE ASSOCIATED COMPANIES, AND AS THE LICENSOR OF WESTERN TO MANUFACTURE AND SELL TO THEM PRODUCTS EMBODYING THE RESULT COVERED BY SUCH EXPENSE, UNJUSTLY ENRICHED THE AMERICAN COMPANY BY MORE THAN $6,000,000.

The American Company was compensated for its Development and Research work for the Associated Companies by four different considerations:

(1) Bonus stock from Western and the earnings thereon for the license to manufacture and sell to the Bell System telephone communication equipment embodying the American Company's inventions;

(2) Earnings on the American Company's investment in the Western;

(3) Added protection on the American Company investment in the Associated Companies;

(4) License Contract Payments.

Appellee and the District Court allocated the entire Development and Research expense against the License Contract payments. The extent to which such allocation was unfair to the Appellee is shown by the substantial character of the three sources of values not considered by them.

(1) Bonus Stock from Western.

In 1881 the American Company said (O.R. VII, 2354):

> "to obtain a permanent interest in the manufacture of telephones and apparatus, as well as to ensure the highest standards in the same, we have bought the plant and business of Charles Williams, Jr., of Boston, and an interest in the Western Electric Manufacturing Company of Illinois, and propose to merge the two in a consolidated company, which will avail of the good will, business and patents owned by that company, as well as our own, and secure an economical management for the whole of our manufacturing interests. We expect to make this an important and valuable part of our business."

The history of this bonus stock from 1882 to 1930 is detailed in the Appendix (Appendix, p. 66-7). It shows that in 1922 the book value of this stock was $3,670,071, represented by 24,490 shares. The cash dividends on this stock during the eight-year period 1923 to 1930, inclusive, totaled $6,091,000 and on December 31, 1930, the book value of the stock had increased from earnings $2,053,242 to $5,723,313, represented by 183,675 shares (Appendix, p. 66-7).

In respect to this bonus stock, the American Company's work of development and research has significance in three aspects. *First*, the value of the use of the American Company's work was partly paid for by this stock. *Second*,

this work stimulated Western manufactures and created profits to enhance the value of such bonus stock and to provide the dividends thereon. *Third,* through its policy of standardization, the American Company confined practically all purchases of telephonic appliances for the Associated Companies to Western, the American Company determining the necessity for and utility of such purchases and specifying the general character thereof. By arranging all contact between the Associated Companies and Western through its own departments, the American Company acted at the same time as the selling agent for Western and as the purchasing agent for each Associated Company, including Appellee. This arrangement, therefore, assured to the American Company continued returns on and enhancement of its bonus stock; its Development and Research expense is, therefore, its investment in part for that purpose.

(2) Returns on American Company's Investment in Western.

For the years 1926 to 1930, inclusive, it is possible to determine the return to Western from its business with the Bell System. The record reveals that on the District Court's findings, Western's per cent return from Bell business on capital and surplus was (Appendix, p. 72):

1926	16.13%
1927	21.87
1928	26.47
1929	19.83
1930	8.30

During the period 1923 to 1930, inclusive, the American Company received in cash dividends a yearly average of over 25% on its average investment of $64,000,000, which

return represented an average yearly return to the American Company's stockholders of over 39% on their capital stock holdings applicable to the American Company's investment in the Western* (R. VIII, 4377).

(3) Added Protection on the American Company's Investment in the Associated Companies.

The fact that the American Company as the investor in the Associated Companies could specify what new inventions, discoveries and improvements in the art should be woven into the plant of the Associated Companies protected its investment against impairment through failure to keep abreast or ahead of the art. The American Company considered such protection of substantial value (R. III, 2146, 2163; O.R. VII, 2539). Certainly it is a value which the ordinary investor does not receive from ordinary business undertakings of similar risks and uncertainties (R. I, 205).

*Appellee's witness on Rate of Return testified:

"If I were getting a true picture of the earnings of the American Telephone and Telegraph Company, I would take the earnings and the undistributed earnings from all of the subsidiaries. I omitted the undistributed earnings of the Western Electric Company and its subsidiaries, simply because it seemed to be a custom of the company to treat that as an investment, and not as a telephone operating property" (R. II, 1366).

DISCUSSION AS TO CONTENTION NUMBERED VI.

VI.

THE DISTRICT COURT'S FINDING THAT THE ENTIRE AMOUNT OF CHARGE TO LICENSE CONTRACT PAYMENTS TO COVER DEVELOPMENT AND RESEARCH EXPENSE SHOULD BE ALLOCATED TO OPERATING EXPENSE AND NO PART THEREOF TO FIXED CAPITAL ACCOUNT, UNDULY BURDENED APPELLEE'S CUSTOMERS TO THE EXTENT OF FROM 25% TO 75% OF SUCH CHARGE DURING THE YEARS 1923 TO 1931, INCLUSIVE.

The District Court found that from 80% to 90% of Western's sales of telephone communication equipment are carried into the capital accounts of Appellee, and the balance used for maintenance purposes and carried into operating expenses (R. III, 2506-7, 2517). As already noted, the non-Bell companies purchasing the equipment embodying the American Company's inventions make no direct payment to the American Company as royalty or compensation for the use of such inventions; the charge is loaded into the price of the article sold by Western (Appendix, p. 73). This is true of patented articles of similar character purchased by Appellee and other companies from other manufacturers, who develop inventions through Development and Research work, including the teletypewriters purchased by the Bell System prior to 1930 (R. IV, 2840a; R. VIII, 4859).

The District Court allocated as operating expense the License Payment covering the Development work for inventions on apparatus which go into fixed capital account.

By so doing, it amortizes that expense in the year in which it is paid. The result of this treatment is that Appellee's telephone service charges are required to provide current earnings to cover 100% of the license payment to the American Company for the value of the Development and Research work, whereas the telephone service charges in the territory of the non-Bell customers need provide current earnings only to cover the depreciation expense charges and return on the amount in the capital account applicable to such values. In the Appendix hereto (Appendix, pp. 68-9) are given in detail the computations showing the effect on the telephone service charges in the Bell and non-Bell territories of such difference in treatment of royalty payments. These computations show that if the non-Bell method of payment and accounting practice had prevailed in Appellee's Chicago Intrastate business during the period 1923 to 1931, inclusive, only $1,078,461, or 49.85%, of the $2,163,223 Development and Research costs which Appellee allocated to such business would have been charged to operating expenses under the existing rates; that the reduction in operating expense in respect to such costs would have ranged from a maximum 77.11% of the allocated cost in 1923 to a minimum 24.03% in 1931; that such reduction would have ranged from $87,526 to $174,486 per year, aggregating $1,084,761 for the period. Such computations show also that such reduction would have been increased had the attacked rates been in effect.

Account No. 527 of the Uniform System of Accounts, in force since 1913, and covering the License Contract payment as an operating expense* (R. VIII, 4463, at 4473) does

*"527 Licensee Revenue—Dr. When a telephone company is granted by another telephone company the use of its patents, or is furnished instruments and equipment and general supervision under an agreement for apportioning the revenues of the licensee, the proportion accruing to the licensor should be included by the licensee in this account" (R. VIII, 4463, at 4473).

not cover the Development and Research provisions of the License Contract, as they did not come into being until 1919 (*supra,* 119).

The Uniform System of Accounts was intended to have uniform application to all telephone companies of the same class and to the same operations of each company. As Appellee and other telephone companies charge the Development and Research expense for inventions included in the manufacturer's price of items which go into the fixed capital account in the case of purchases other than of Western's manufactures, no reason exists for making any difference in treatment of such payment if and when made through the license contract payment by the Associated Companies to cover Western's manufactures.

Part II.

The American Company's Expense of Direct Distribution of New Securities and of Servicing Outstanding Securities.

Preliminary Statement.

The fields of operation of the American Company as a corporation have been stated (*supra*, 81). The investment in each field during the period of the litigation was:

1. At the beginning of 1923 the American Company's book investment in stock of Associated Companies aggregated $662,529,359, which increased to $1,939,270,421 by the end of 1931 (R. VI, 4025; R. VIII, 4424).

2. In 1923 the American Company's book investment in stocks of companies other than the Associated Companies—Western, Bell Telephone Laboratories Inc., and 195 Broadway Corporation—aggregated $92,938,687, which increased to $168,855,388 by the end of 1931 (R. VI, 4008R, 4027; R. VIII, 4424).

3. In 1923 the depreciated book cost of Long Lines property was $91,625,198, which increased to $310,266,469 in 1930 (R. VIII, 4406).

4. From 1923 to 1927, inclusive, the depreciated book cost of telephone instruments used in the License Contract operations increased from $16,318,631 to $22,407,040 (R. IV, 2951; R. VI, 4012, 4016); the other assets used in such operations, as found by the District Court, included the buildings housing the General Staff as well as the other personnel of the American Company and one-half of the investment in the Bell Telephone Laboratories, Inc.—all

having a book value not in excess of $15,500,000 to the end of 1931 (R. VII, 4093, 4147).

5. Licensing, for valuable consideration, inventions for commercial use in products distributed in the non-telephone field, and in the telephone field within and outside of the Bell System, required no special property investment.

The two fields of activity of the American Company, that is, ownership of stock and other securities of the Associated Companies and of other companies, are referred to herein as the Holding Company operations; the licensing of inventions is referred to herein as Royalty Operations.

During the years 1923 to 1930, inclusive, the American Company sold to bankers $250,000,000 face amount of bonds* and sold direct to its own stockholders, without the intervention of bankers as the medium of distribution, $977,278,400 par amount of stock and $219,112,700 face amount of bonds.**

Such direct distribution was accomplished by the American Company through the use of its own personnel, some of whom were regular employees but most of whom were specially recruited for the job, and through the use of those of the Associated Companies (R. V, 3179-3216).

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*In 1923 and 1930 the American Company sold debenture bond issues of the face value of $100,000,000 and $150,000,000, respectively, to J. P. Morgan and Company at 94.75% and 96.50% of face value respectively (R. VII, 4260A; R. I, 871).

**In 1923, about $20,000,000 par amount of stock of the American Company was offered by it at par to its stockholders in accordance with the previous offer made in 1922 (R. VII, 4373). Additional stock issues of the American Company were offered to them at par as follows:

1924	$151,157,500 (R. V, 3216)
1926	154,127,500 (R. V, 3214)
1928	185,863,000 (R. V, 3204)
1930	257,940,700 (R. V, 3191)

In 1929 the American Company offered to its stockholders at face value $219,112,700 Ten Year Convertible Bonds (R. V, 3194). In 1930, practically all of these bonds were converted into the American Company's stock on the basis of $180 per share and in connection therewith $206,189,700 par amount of stock was issued (R. VIII, 4374).

$3,153,919 represents that portion of the total expense of direct distribution during the period 1923 to 1931, inclusive, which the American Company itself paid through its Treasury Department (R. I, 861; R. V, 3185), exclusive of the expense incurred by the Associated Companies including Appellee and not reimbursed to them (*infra*, 219 *et seq.*). This $3,153,919 expense of direct distribution was in lieu of the discount or underwriting fee paid to bankers where securities are sold to them for resale (R. I, 872). The American Company charged as part of its own operating expenses its expenses of direct distribution of new securities (R. IV, 2917; R. I, 881) but charged to surplus the discount on the sale of securities to bankers.

What the District Court Did.

The District Court followed Appellee's allocations which allocated in each of the years 1923 to 1931, inclusive, 6% of the American Company's expense of direct distribution of new securities to the Holding Company and Royalty operations of the American Company, aggregating for the period $189,235, and 94% of such expense to License Contract operations, aggregating for the period $2,982,684 (R. I, 881; R. IV, 2917). Appellee amortized the discount on the sale of securities to bankers over the period of the loans and charged such amortized amount as part of the License Contract costs only when it became part of the costs of funds as used in License Contract operations. The amount of resulting burden is negligible and no issue is raised herein in respect thereto.

During the same nine-year period the American Company spent $7,879,066 (R. I, 861-4) to service all of its outstanding stocks and bonds; that is to say, the transfer of the stock, handling of the dividends, paying interest

coupons, etc., expense of the character which any large company would have that has its securities outstanding in the hands of many investors* (R. I, 878). Appellee, allocated 6% of this servicing expense to the Holding Company and Royalty operations of the American Company, aggregating for the period $472,745, and 94% of such expense to License Contract operations, aggregating for the period $7,356,221 (R. I, 881; R. IV, 2917).

The 6% and 94% figures were determined by Mr. Heiss, Comptroller of the American Company, as Appellee's witness who made the allocations "on a percentage given by Mr. Blair-Smith * * * that is, the 6 per cent that I use in column 3 is the figure which Mr. Blair-Smith said should be allocated outside of the license contract work in his department" (R. I, 881).

Mr. Blair-Smith, Treasurer of the American Company, testified (R. I, 867):

> "The amount of money that has been raised by American Telephone and Telegraph Company and invested in Western Electric, in Bell Telephone Securities Company, in Bell Laboratories and in the 195 Broadway Corporation, is about 6 per cent of the assets of the American Telephone and Telegraph Company. That is where I get my 6 per cent."

The above shows clearly that the allocation of the Treasury Department expense merged the American Company's

*At the beginning of 1923 the American Company had outstanding $669,347,400 par amount of stock in the hands of 248,925 stockholders, the average stockholding being 26.89 shares; at the end of 1931 the outstanding stock had increased to $1,865,836,100; the number of stockholders had increased to 644,903, and the average stockholding was 28.93 shares (R. V, 3299; R. VIII, 4421). During the nine-year period the American Company had had 875,000 transfers of stock, involving the cancellation of 2,100,000 stock certificates and the issue of 1,800,000 new stock certificates; 14,800,000 dividend checks were drawn (R. I, 860-864). The funded debt of the American Company at the beginning of 1923 was $226,604,800, which increased by the end of 1931 to $458,300,900 (R. V, 3299; R. VIII, 4425), but the record does not show the number of funded debt investors nor the average holding thereof.

License Contract relationship with its investor relationship to the Associated Companies and included as part of the License Contract costs the entire costs incident to such investor relationship.

The American Company's expense of direct distribution of new securities and of servicing outstanding securities aggregating $11,032,985 represented over 85% of the entire Treasury Department expense of $13,033,999 for the nine-year period (R. I, 861). The difference of $2,001,014 represented the American Company's expenses (1) of financing the General Department which conducted the License Contract Operations, (2) of handling the Employees' Stock Plan, (3) of advising the Associated Companies in their treasury work, and of handling funds and making advances to the Associated Companies. Appellants assigned error to the District Court's findings on this part of the License Contract charges (R. III, 2537) and in support of their position Appellants offer the following:

SUMMARY STATEMENT OF APPELLANTS' CONTENTIONS.

I. The American Company's Holding Company operations as investor in Appellee do not come within the License Contract.

II. The American Company as the investor in Appellee is not entitled to reimbursement of expenses of raising funds to make or maintain its investment in the stock of Appellee.

A. The reimbursement to the American Company violates the orders of the Illinois Commerce Commission un-

der which the American Company purchased stock in Appellee and is contrary to law.

B. Appellee's showing of alleged savings through concentrated holdings of its stock is illusory.

DISCUSSION AS TO CONTENTION NUMBERED I.

I.

THE AMERICAN COMPANY'S HOLDING COMPANY OPERATIONS AS INVESTOR IN APPELLEE DO NOT COME WITHIN THE LICENSE CONTRACT.

The License Contract does not cover the allocation to License Contract operations, of the expense of the American Company's direct distribution of new securities, and of servicing outstanding securities applicable to its investments in the Associated Companies.

The License Contract* is not predicated upon the American Company, or any assignee of the American Company, owning any stock in Appellee. On the contrary it expressly provides that the American Company may at any time relieve itself of all of the obligations of the License Contract by the mere act of assigning its interest in the License Contract to an assignee who shall agree to perform the stipulations thereof, whether such assignee be a $1,000 corporation or be a corporation not owning a single share of stock

*The License Contract requires the American Company to furnish: "(b) Advice and assistance in any financing required to be done by the Licensee in the extension, development or improvement of its telephone system within its said territory and in the general matter of its finances; aid in securing funds on fair terms, as and when needed for new construction and other expenditures, but not, at any time, to a greater extent than the then condition of the finances and credit of the Licensor may permit; active assistance in the marketing of the Licensee's securities; and such other necessary financial support and assistance in the premises as will tend to serve the best interests of both companies" (O.R. IV, 1207).

in Appellee (O.R. IV, 1215), or be a corporation having three stockholders, of whom two own one share each.

Nor can any justification be predicated on Appellee's financing operations covering credit obligations. Appellee's bonds were sold in 1923 to J. P. Morgan & Company at a discount, and no claim is made that the American Company as the investor in Appellee owned any of them (R. I, 871). The American Company received deposits from Appellee and made negligible temporary advances to it during the period under investigation (O.R. VI, 2103; R. VIII, 4786-89; R. V, 3083-90). But Appellee at the 1932 hearings denied that the American Company's expense in making such loans was properly chargeable as a License Contract expense (R. I, 1003; R. II, 1054-60); and the District Court held that the American Company's expense in holding funds available to make such loans was not covered by the License Contract (R. III, 2511).

DISCUSSION AS TO CONTENTION NUMBERED II.

II.

THE AMERICAN COMPANY AS THE INVESTOR IN APPELLEE IS NOT ENTITLED TO REIMBURSEMENT OF EXPENSES OF RAISING FUNDS TO MAKE OR MAINTAIN ITS INVESTMENT IN THE STOCK OF APPELLEE.

Appellee offered the following justification *outside the License Contract*: The expenses of raising money and of servicing outstanding securities would be incurred by any corporation having its securities well scattered; Appellee is saved such expense by having nearly all of its stock represented by a few certificates owned by the American Com-

pany; therefore Appellee should stand a portion of the American Company's expense of raising funds and of servicing outstanding securities as compensation to the American Company for effecting such saving; the measure of that portion is the amount of such saving (R. I, 866, 876, 878; R. II, 1061-66).

A.

The reimbursement to the American Company violates the orders of the Illinois Commerce Commission under which the American Company purchased stock in Appellee and is contrary to law.

The issue and sale by Appellee of its stock during the period under investigation were in each case authorized by the Illinois Commerce Commission (O.R. V, 1833); the purchase by the American Company of its pro rata share of each authorized issue was, in each case, approved by the same Commission on petition of Appellee and the American Company (O.R. IV, 1530-46). Each authorization specified that the issue and sale by Appellee of its stock to all its stockholders and that the purchase by the American Company of its pro rata share of such stock and stock not subscribed by others should in each case be at not less than par (O.R. IV, 1530-46). The American Company paid par during the period 1923 to 1931, inclusive, for its pro rata portion of stock, paying 8% dividends (O.R. V, 1833). Any reimbursement to the American Company would constitute a rebate and would result in the purchase of stock at less than par in violation of the orders.*

*Any claim that the American Company rendered a service in purchasing unsubscribed stock at a premium can be dismissed with the observation that the total premiums paid on stock during this period aggregated $1,257 (R. VIII, 4793; O.R. VI, 2120B).

The reimbursement to the American Company disregards established principles of law. A stockholder as such is not entitled to such reimbursement. There is nothing in the law which requires or entitles a corporation to give any advantage to a majority corporate stockholder because such majority corporate stockholder itself has scattered stockholders, over a majority corporate stockholder which has only three stockholders of whom two own one share each or over a majority stockholder which is a partnership of many persons, or over an individual majority stockholder who issued or caused to be issued certificates of participation in his stock investments and who has issued extensively his own credit obligations as a medium of financing, or over any minority corporate or individual stockholder.

B.

Appellee's showing of alleged savings through concentrated holdings of its stock is illusory.

Appellee produced some imaginary figures purporting to indicate the extent of the saving to it through having the American Company as the owner of over 98.5% of its stock and having a total number of stockholders ranging from 141 in 1923 to 167 in 1930 (R. IV, 2964-6). Appellee computed what it estimated it might have had to spend to issue and service $10,000,000 par value of stock each year for nine years if its stock were held in units of 15 or 30 shares each (R. IV, 2964). In fact however Appellee did not sell its stock, applicable to its Chicago Intrastate business, in any such manner.* Appellee included as part of

* Appellee's stockholders purchased $10,000,000 of capital stock in each of the years 1924 and 1925, $30,000,000 in 1927 and $40,000,000 in 1930 (Appendix, p. 125). $54,874,813 or 61%, of such $90,000,000 capital stock is allocable to Chicago intrastate business (Appendix, p. 125).

the additional costs $10,000 (R. IV, 2965) as the expense of an annual audit by an outside firm although Appellee also included under the "Comptroller's Department" expense chargeable as a License Contract cost a portion of the American Company's Traveling Auditor's expense ranging from $134,890 to $252,061 per year, on the ground that such Auditor saved Appellee the expense of an outside audit (R. IV, 2918-21). Appellee included as part of the additional cost the expense of sending out annual reports, although Appellee included under "Administration Department" expense a part of the American Company's cost of printing and sending out its annual reports (R. VIII, 4504a-g). Appellee computed that an increase of 88% in the number of shareholders holding 30 shares each from 1923 to 1929 would involve an increase of 215% in expense of servicing securities during that period, but the experience of the American Company shows that an increase of 88% in the number of shareholders during that period holding an average of 28 shares each actually resulted in an increase of only 23% in the expense of servicing (R. I, 861-864). Appellee included as part of the additional cost the expense of issuing new securities but Appellee already included in its operating expenses all or most of the cost to it of assisting the American Company to sell the latter's stock to Appellee's employees under the Employee's Stock Plan, on the installment plan, and of assisting the American Company to sell the latter's stock to the public in Appellee's territory (*infra,* 220). In Appellee's imaginary set-up such cost would be used to distribute Appellee's stock and not the American Company's stock. On Appellee's own figures (which as will later be shown represent but a small portion of Appellee's actual cost of rendering these services, *infra,* 221), the cost to Appellee to assist the American Company

will cover the whole or the major portion of Appellee's alleged costs in its imaginary set-up (R. VI, 3809-10).

Part III.

The American Company's Expense of Operating Ten Departments.

What the District Court Did.

The District Court followed Appellee's allocation of the American Company's current expense applicable in the operation of its ten departments of (1) public relations, (2) Comptroller, (3) Secretary, (4) Administration (including sundry items), (5) General Service Bureau, (6) legal, (7) treasury (other than direct distribution and servicing of securities), (8) personnel, (9) information, (10) operations—c (general).

The total expenses of these departments range from $4,389,000 to $7,548,000 per year (Appendix, p. 46). Their work has to do in whole or in part with the general administration of all the business of the American Company. From 90% to 100% of the expenses of the departments was charged to License Contract operations. The allocations of the expenses of the first eight departments to License Contract operations were made by Mr. Heiss, Comptroller of the American Company, on the basis of the picture which he testified he had of the American Company:

> "The primary activities of the American Telephone and Telegraph Company taken as a whole are three. One is the operation of its Long Lines. That has been taken out in my allocation. The Long Lines expenses, and assets and everything have been excluded. The second activity is the license contract—is to render

service to the companies under the license contract arrangement. And the third activity is simply the miscellaneous—minor miscellaneous activities that we may carry on, which is reflected by the very first diagram I think that Mr. Blackman introduced in that case. That is also reflected by the elimination which I have made in this case. That is my picture of the American Telephone and Telegraph Company. * * *

"The investor relationship of the American Telephone and Telegraph Company can be included in the third group, the miscellaneous, but divided into two parts. All we have to do as regards that third group is to see that our investment in stocks is so much, our dividends are so much, and those are the same dividends that anyone else receives. Now, the cost of holding those stocks, and the cost of the custodianship of them, is a pleasure rather than a burden" (R. I, 984, 987).

The chart to which Mr. Heiss referred was A-99 (R. IV, 2834A), which was thus characterized by Appellee's witness, who offered it:

"The chart taken as a whole shows that practically the entire property of the American Company owned by it directly or indirectly is represented by its interest in the twenty odd associated companies and in facilities serving those companies" (R. I, 524).*

*"Mr. Blackman: And in that little chart that I put in evidence at the beginning of this branch of proof, that divides up the assets of the Bell System into little grooved squares. You will see that there is practically nothing but the associate companies and the Long Lines.

"Of course, there is the Western Electric, which we colored in light blue because while it was not an associate company, itself, its activities were directed 95 per cent, or thereabouts, to the service of the associate companies, and the proof that has been introduced tends to show that it sells its goods to them at a price that is not only reasonable, but lower than it would have the right to charge for an ordinary manufacturing profit.

"Now, Mr. Heiss has allocated these things on the basis as I understand it, that the Administrative Department of the American Telephone and Telegraph Company administers all the other departments, which, of course, it does.

"Now, the energies of those other departments are directed; about 95 percent, to the service of the associate companies under this license contract" (R. I, 894-5).

Obviously such a picture views the American Company as the operator of the property of the Associated Companies and disregards its Holding Company operations as an investor in their securities to which a large part of its administration expenses have application. By so viewing the American Company's operations, Appellee merged its License Contract relationship with its investor relationship to the Associated Companies, and included as part of the License Contract costs the entire cost to the American Company of the work of these departments relating to the exercise of its functions as a corporation owning investment securities in the Associated Companies and having outstanding its own securities in the hands of its own investors. The District Court followed Appellee's allocation, to which Appellants assigned error (R. III, 2520).

In support of their position, Appellants offer the following:

SUMMARY STATEMENT OF APPELLANTS' CONTENTIONS.

I. Appellee's allocation produces a fantastic result.

II. The American Company's Holding Company operations as investor in Appellee do not come within the License Contract.

III. The American Company is not entitled to reimbursement of expenses incurred in its own operations incident to its ownership of the stock of Appellee.

DISCUSSION AS TO CONTENTION NUMBERED I.

I.

APPELLEE'S ALLOCATION PRODUCES A FANTASTIC RESULT.

As illustrative of the result produced, contrast the American Company operations in 1928 in the regular course of its business with Appellee's allocation of expenses incurred in connection therewith.

In 1928 the total License Contract revenues of the American Company aggregated $17,622,365 (O.R. VI, 2292). In 1928 the American Company's ownership of the stocks of the Associated Companies, as carried on its books, represented an average investment of $1,419,568,937, on which it received $106,169,963 in cash dividends. Its share in the undivided profits in the treasuries of the Associated Companies was $26,096,550 (R. VII, 4366a). The average yield from cash dividends on its investment in 1928 was 7.48% (R. VI, 4027). Its total earnings from the Associated Companies related to its investment in them (including as part of the investment the portion of surplus of each Associated Company applicable to the American Company's capital investment), represented an average return of 8.38%.*

The cash dividends received by the American Company in 1928 from the Associated Companies represented 45.03% of its total earnings from all sources, including Long Lines (R. VI, 4008J). In December, 1928, the number of stockholders of the American Company was 454,596, an increase of 31,016 for the year of 1928 (R. V, 3332). The outstand-

*Computed from R. VII, 4366a.

ing capital stock of the American Company increased in 1928 through direct distribution to its stockholders by $186,275,800 while its funded debt decreased by $3,901,900. On December 31, 1928, the American Company had outstanding funded debt of $380,196,000, and capital stock of $1,289,691,400 (R. V, 3331). The dividend payments by the American Company during 1928 aggregated $103,821,440 and interest payments, $23,087,116. It retired funded debt or deposited for sinking fund retirement of funded debt $3,134,798.14 (R. VII, 4111). It had an audit made by outside auditors, held an annual meeting of stockholders and had meetings of directors as a Board of Directors and as an Executive Committee (R. VIII, 4829-31).

The annual audit actually cost $8,000 (R. VIII, 4504f). Mr. Heiss charged the American Company as a Holding Company 5% or $400 for the outside auditing. However, Appellee's chief accountant produced a computation that an annual audit by an outside concern would cost Appellee $10,000 (R. IV, 2965). The printing and distribution of the Annual Reports to stockholders of the American Company, (including advertising) actually cost $31,889 (R. VIII, 4504f). Mr. Heiss allocated to the American Company as a Holding Company $1,594. However, Appellee's chief accountant charged that an Annual Report would require 4c postage per mailing (R. IV, 2966). On this basis the postage necessary to mail the reports to 454,596 stockholders (R. V, 3332) would itself amount to $18,184, or more than ten times as much as the entire cost allocated by Mr. Heiss to the Holding Company. As indicative of the opportunistic points of view of Appellee's witnesses, we note that its own chief accountant, testifying to justify the American Company's charges to Appellee on the ground that the American Company saved Appellee the expenses incident to having

many stockholders, showed the large cost of Annual Reports as one of the elements of saving (R. I, 989). Appellee's witness, Mr. Heiss, testifying to justify the propriety of charging a negligible amount to the American Company as a corporation having many stockholders, testified:

> "I also charged against the license contract the annual reports of the American Telephone and Telegraph Company because the business of the American Telephone and Telegraph Company, after you take out the Long Lines, is almost entirely license contract. They didn't send out these reports, as incident to their acquiring or holding stocks. The people throughout the United States, the Associates are interested in those reports" (R. I, 989-990).

The American Company in 1928 paid its directors in fees $32,670 (R. VIII, 4504f). Mr. Heiss allocated $1,633 to the American Company as a Holding Company. Mr. Heiss testified:

> "I charged as part of the license contract costs the fees paid to the Directors of the American Telephone and Telegraph Company when they met, because they deal to the extent of 95% of their activity with license contract activities" (R. I, 989).

But access to the Minute Book of the Board of Directors, which would show the nature of their work, was denied to Appellants (R. VIII, 4801; *infra,* 202). Appellants' motion to compel production (R. III, 2493) was denied by the District Court (R. III, 2500), to which ruling Appellants excepted and have assigned error (R. III, 2576, 2500). From colloquy between Court and Counsel it would appear that the theory of charging the directors' fees was that Appellee was a department of the American Company (R. I, 892-5, 989).

The salaries of the President of the American Company and his staff and the General Administration Department for the year 1928 were $369,857 (R. VIII, 4504f). Mr. Heiss allocated to the Holding Company operations, $18,493, the equivalent of pay for less than three weeks' work.

The Secretary's Department expenses were shown as $68,463, but Mr. Heiss allocated but $3,423 to the non-License Contract operations, which was less than the amount which he allocated to Chicago as its share of the expenses of that department (R. IV, 2924-5).

As to the Comptroller's Department, whose total expenses for 1928 are shown to be $1,484,471 (R. IV, 2920), Mr. Heiss deducted 5% or $74,233 for non-License Contract operations (R. I, 885-6). His approach is illustrated by his description of the work of the Comptroller's General Books and Records Division (R. I, 883-4):

> "A considerable part of that work is of direct benefit to the associate companies. For instance, the relations with the companies in the advancement of funds to them from time to time is one direct relationship; the matters relating to the employees' stock plan is another. Then, as regards the keeping of the books, this department keeps the books and the records for the several departments, and for the Company as a whole, and in that respect it goes back indirectly as a benefit to the associate companies and the Long Lines.
>
> "The assets of the Associated Companies represent more than 90 per cent of the total assets of American Telephone and Telegraph Company and I have figured that the expenses of my department follow these assets" (R. I, 867).

From the above, it is clear that Mr. Heiss was merging the License Contract relationship and the investor relationship to the Associated Companies to pass on to them the

entire expenses of the American Company in connection with such investor relationship. Such treatment is also evident from the colloquy between him, his counsel and the Court, reproduced in the margin.* That such treatment was limited to passing on only the expenses and not the benefits is apparent from his testimony (R. II, 1170):

> "Q. Mr. Heiss, if the A. T. & T. makes the investigation in the radio field and charges all the expense to the licensees, to satisfy them that there is nothing in the radio field that is going to hurt them, and as a result of this investigation the A. T. & T. get an idea, gets ideas, and the A. T. & T. can sell those ideas for ten million dollars, it is your thought, is it, that the A. T. & T. can keep the ten million dollars, or is entitled to a credit for the ten million dollars?
>
> "A. Looking at it from the approach that we have here, where we are contracting parties, if we give the service to the companies that we agreed to give them under the license contract agreement, and if out of that research we get certain by-products that we can sell in other fields, it is not any concern of anyone what the American Company does with those by-products, that is if we are contracting parties. That is the property of the American Company to use it as it wants to."

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*"Judge Wilkerson: Now, on the theory of this case we heard advanced here before, besides the services rendered under this contract, all the American Telephone and Telegraph had to do was to vote the stock of the Illinois Bell. Now, why should you charge a part of the salary of the President of the American Telephone and Telegraph Company to the Illinois Bell?

"The Witness: Well, your Honor, let's look at the functions of the American Company. First we have the Long Lines Department. Now, the expenses of the Long Lines Department are entirely excluded from these figures. Now, what is left of the work of the American Company is very largely the work done in serving the associate companies under the license contract, and generally" (R. I. 892).

* * * * * *

"Judge Wilkerson: I understand that; but I wanted to know in particular in regard to the President.

"The Witness: All right. Now, the President supervises all of this work, and if the work of these various departments is chargeable against the associate companies, then the expense of the executive who has general supervision and directs generally all of those activities should be likewise apportioned.

"Judge Wilkerson: You have made this set-up on a theory which

The expenses of the Information Department covering advertisements were charged to License Contract Operations. But these advertisements show:

(1) That the American Company is featured as an institution. Thus we find the headings "What is the A. T. & T." "Where the Bell System's Profit Goes," "How Many are 421,000 Stockholders?" (R. VIII, 4625, 4629, 4631);

(2) Each of the advertisements is either declared to be an advertisement of the American Company or is in the name of the American Company (R. VIII, 4625-31);

(3) Many of the advertisements discuss the relationship of the American Company to its stockholders (R. VIII, 4625-8, 4630-1);

(4) Some of the advertisements discuss the question of Western as a manufacturer of telephone instruments (R. VIII, 4625-6, 4630); and

(5) Some of the advertisements refer to the Bell Telephone Laboratories' work (R. VIII, 4625-8).

Nothing can be done in the Department of operations (c) general which does not benefit Western or the American Company in its Holding Company relations at the same time that it benefits the Associated Companies. Yet the entire expense of the Department was charged to License Contract operations (R. IV, 2852a).

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disregards, really, corporate form, and treats the business as—looks at it as an entire organization?

"The Witness: Substantially that. That is that the expenses of the American Company are expenses in addition to those of the associate companies.

"Judge Wilkerson: That is you have made this on the theory which the defense is contending in this case, namely, that the corporate form is to be eliminated, and that we are to look at it as if it was one organization. Now, accepting that as the argument, you have made that on this theory; do I understand it?

"Mr. Blackman: I think that approaches it, sir. What we have done is this: we have tried to give what the Supreme Court said we should give, and that is the fair share of all our expenses connected with this license contract which we should allocate to the Chicago area" (R. I, 892-893).

DISCUSSION AS TO CONTENTION NUMBERED II.

II.

THE AMERICAN COMPANY'S HOLDING COMPANY OPERATIONS AS INVESTOR IN APPELLEE DO NOT COME WITHIN THE LICENSE CONTRACT.

For the reasons already stated, the creation or maintenance of the American Company's investor relationship to Appellee is not covered by the License Contract (*supra*, 179), and the expenses incident to such relationship cannot be justified by such contract.

DISCUSSION AS TO CONTENTION NUMBERED III.

III.

THE AMERICAN COMPANY IS NOT ENTITLED TO REIMBURSEMENT OF EXPENSES INCURRED IN ITS OWN OPERATIONS INCIDENT TO ITS OWNERSHIP OF THE STOCK OF APPELLEE.

The District Court's findings on Fair Return and Appellee's showing thereon, treated the American Company investor relationship to Appellee as that of the ordinary investor to the ordinary public utility corporation (R. I, 202-5; R. III, 2514, *infra*, 528). By considering the American Company's expenses as a Holding Company investor in the stock of Appellee as License Contract expenses properly chargeable to Appellee's operating expenses, the American Company as investor receives an *advantage of additional pecuniary profit* which is not received by Appellee's

other investors or by the ordinary investor in business undertakings outside the Bell System. No reason is given for any such preference and no justification exists therefor. The District Court's findings on Fair Return and License Contract charges covering the American Company's operations of its ten departments above enumerated cannot both be correct.

Part IV.

The American Company's $30,395,000 Appropriation to Reserve for Contingencies.

What the District Court Did.

The District Court found that under the License Contract the American Company was "obligated to insure and hold harmless" Appellee and the other Associated "against loss or damage from suits or judgments" for patent infringement in the use of telephonic appliances recommended by the American Company; that such obligation constituted a substantial liability; that the American Company's Appropriation to its Reserve for Contingencies of $30,395,800 in the years 1924 to 1928, inclusive, represented a contingency reserve over the period January 1, 1923 to January 1, 1932, to meet such liability; that such a reserve was reasonable; that the charge to Appellee, as part of its operating expenses, to cover compensation to the American Company for the benefit of such obligation should be the amount of such reserve applicable to Appellee's Chicago intrastate business ranging from $98,382 in 1931 to $281,740 in 1925 and aggregating for the period $1,405,326 (R. III, 2510-1). To these findings Appellants assigned error (R. III, 2539), and in support of their position offer the following:

SUMMARY STATEMENT OF APPELLANTS' CONTENTIONS.

I. The District Court disregarded Appellee's License Contract in force to September 25, 1930, covering the American Company's obligation for patent protection in the use of telephonic appliances and its relation to the alleged reserve which the District Court claimed the American Company set up as financial protection against its consequences.

II. The American Company's appropriations from 1924 to 1928, inclusive, to its Reserve for Contingencies created in 1900 were not intended by it to be and could not legally become a Reserve against financial liability on its patent protection obligation to Appellee.

III. The amount of the appropriations to the Reserve for Contingencies cannot become the measure of compensation to the American Company for the benefits of its obligations for patent protection.

IV. The District Court's finding that the entire amount of charge to License Contract payments to cover patent protection should be allocated to operating expense and no part thereof to fixed capital account, unduly burdened Appellee's customers to the extent of at least 40% of such charge during the years 1923 to 1931, inclusive.

DISCUSSION AS TO CONTENTION NUMBERED I.

I.

THE DISTRICT COURT DISREGARDED APPELLEE'S LICENSE CONTRACT IN FORCE TO SEPTEMBER 25, 1930, COVERING THE AMERICAN COMPANY'S OBLIGATION FOR PATENT PROTECTION IN THE USE OF TELEPHONIC APPLIANCES AND ITS RELATION TO THE ALLEGED RESERVE WHICH THE DISTRICT COURT CLAIMED THE AMERICAN COMPANY SET UP AS FINANCIAL PROTECTION AGAINST ITS CONSEQUENCES.

Neither the Western Electric Contract of 1882 (O.R. VI, 2068), nor the 1908 modification thereof (O.R. VI, 2075) required the American Company to protect Western against infringement suits on patents owned by the American Company or by Western which were embodied in telephone instruments or telephonic appliances manufactured by Western; the latter assumed all such liability (O.R. VI, 2070).

The Western Electric contracts with Appellee have never contained protective provisions against infringement liability in the use of telephonic appliances (O.R. VI, 2033-8). Western had no general obligation to its non-Bell customers covering such protection. Upon request it agreed to protect such customers without increasing the sales price of the items involved (R. II, 1076).

Under its Original License Contract of 1881 in force to 1919, Appellee was indemnified and saved harmless by the American Company against patent infringement lia-

bility in the use of telephone instruments embodying the *Bell* patents; it contained no such protective provisions covering the use of telephonic appliances. (O.R. VI, 1925-33.) The American Company claimed, however, that prior to 1919 it made available its legal and technical experts in defense of Appellee in suits wherein the latter was charged with patent infringement in the use of telephonic appliances recommended for purchase by the American Company. (R. II, 1216.)

As shown above (*supra,* 119) the 1919 License Contract changed the then existing contractual relationship between the American Company, Appellee and Western in respect to the development of inventions for use in telephonic appliances and changed the method of providing for the costs thereof (O.R. IV, 1196).

Sec. 9a of the same 1919 License Contract gave Appellee the right, in respect to leased telephone instruments, to

> "protection and defense against and to be saved harmless from all actions or suits, charging infringement of patents arising out of the use thereof" (O.R. IV, 1206).

The same Section 9a gave Appellee the right in respect to telephonic appliances purchased pursuant to the American Company's recommendations, to

> "ample provision for protecting and defending against and insuring the Licensee against judgments for damage and profits in, all actions or suits, charging infringement of patents, arising out of the use thereof" (O.R. IV, 1206).

The American Company sold to Appellee in 1927 the telephone instruments theretofore leased to it and thereafter Appellee purchased such items from Western (*infra,* 231).

Sec. 2 of the License Contract of September 15, 1930, which superseded the 1919 License Contract covering the use of telephone instruments and telephonic appliances recommended by the American Company, provided:

> "The Licensee shall be protected and saved harmless by the Licensor from all actions or suits charging infringement of patents arising from the use of any telephones or telephonic devices, apparatus, methods, or systems which the Licensor may recommend" (R. V, 3001).

The District Court (R. III, 2510) following Appellee (R. III, 2412), treated Section 9a of the 1919 License Contract and Section 2 of the 1930 License Contract as creating identical obligations by the American Company and having an identical relation to the alleged Reserve which Appellee claimed the American Company set up as a financial protection against its consequences.

For the purposes of the issues discussed herein, the patent provisions of the two Contracts differ (1) in the nature and extent of Appellee's rights and of the American Company's obligations; (2) in the significance and necessary requirements of a reserve set up by the American Company for protection against patent infringement liability; and (3) in the significance of the use of the amount of the reserve as the yardstick to measure the charge to the Associated Companies for patent protection.

(1) Section 2 of the 1930 Contract creates an absolute indemnity liability of the American Company, for the enforcement and satisfaction of which, all of its unpledged assets, aggregating several billions in amount, became available. The obligation of Section 9a of the 1919 Contract to "make ample provision for protecting and defending and insuring against judgments, etc." would be

satisfied and discharged (a) if it paid premiums to an insurance company or companies and the latter became insolvent or were not able to pay the judgments as rendered against the licensees; or (b) if it set aside a fraction only of its several billions of assets as a trust fund, which appeared ample at the date of creation or from time to time but for some unforeseeable reason turned out not to be ample when judgments were rendered against the licensees.

(2) A reserve set up by the American Company as "financial protection" against its infringement liability under Section 2 of the 1930 Contract would not in anywise limit or discharge its liability to Appellee on the one hand, and on the other hand, would not enlarge the rights of Appellee unless the funds in the reserve were liened for the benefit of the obligees of the indemnity obligations of the American Company. The reserve would, however, be an act of conservative management to safeguard the continued payment of dividends and to prevent impairment of the American Company's surplus and capital, by large judgments in future years against the Associated Companies. A reserve set up by the American Company in connection with its obligation under Section 9a of the 1919 Contract, if ample in amount and if set aside as a trust fund for the benefit of Appellee and others similarly situated, free from the creditors of the American Company and free from the possibility of re-transfer to Surplus or to other Reserves will constitute the total action required to be taken by the American Company and discharges its full liability to Appellee and to others similarly situated. But unless so limited, the reserve is of no practical benefit to Appellee pending the time when judgments are in fact entered and is of no practical benefit to it at the date of

such judgments if the American Company prior thereto should have transferred out for other purposes the whole or any part of such reserve or if at the time of such judgments, the American Company should be unable to pay its creditors from its other assets.

Under the 1930 Contract, the Reserve has significance as the American Company's protection against its own undischarged obligation and risk; under the 1919 Contract, the Reserve becomes the insurance protection against Appellee's risk and operates as a discharge of the American Company's obligation.

(3) The value to Appellee of the American Company's obligation under Section 2 of the 1930 Contract is measured by the value of the Entire Unpledged Assets of the American Company available for unsecured creditors including Appellee; the Reserve whether liened or not, may be considered as the measure of the possible net effect of the similar risks undertaken by it; the Reserve does not measure the full value of the obligation. The value to Appellee of the American Company's obligation under Section 9 (a) of the 1919 Contract is measured by the value of the trusteed reserve and no more. It is all that the American Company contributes as consideration for the payment by Appellee and by the other licensees for patent protection. If, therefore, they are required to pay the American Company the full amount of the trusteed reserve the American Company contributes nothing whatsoever and becomes unjustly enriched to the extent that it is able to use the funds in the reserve and receive the earnings thereon pending their use in discharging judgments against the licensees.

DISCUSSION AS TO CONTENTION NUMBERED II.

II.

THE AMERICAN COMPANY'S APPROPRIATIONS FROM 1924 TO 1928, INCLUSIVE, TO ITS RESERVE FOR CONTINGENCIES CREATED IN 1900 WERE NOT INTENDED BY IT TO BE AND COULD NOT LEGALLY BECOME A RESERVE AGAINST FINANCIAL LIABILITY ON ITS PATENT PROTECTION OBLIGATION TO APPELLEE.

In January, 1924, the Executive Committee of the American Company authorized the transfer of $3,000,000 from the surplus earnings of 1923 (R. V, 3433) to its Reserve for Contingencies which had been created in 1900 (*infra*, 204). In January, 1925, similar authorization was made to cover $3,000,000 of the surplus earnings of 1924 (R. VIII, 4821), and at the same time $1,000,000 was ordered transferred from the Reserve for Contingencies to the Employees' Benefit Fund Reserve.*

The Executive Committee authorized the transfer to the Reserve for Contingencies of $6,000,000 in January, 1925, and $4,000,000 in January, 1926, from the surplus earnings of the previous year. In January, 1928, the Committee authorized the transfer to the Reserve for Contingencies of the $14,395,799 balance in the depreciation re-

*The resolution reads "That as of December 31, 1924, there be appropriated from Reserve for Contingencies and added to the Employees' Benefit Fund Reserve already established under the Plan for Employees' Pensions, Disability Benefits and Death Benefits the amount of $1,000,000, provided, however, that as and when authorized by further action of the Board of Directors of this Company or by this Committee, said amount may be withdrawn from said Reserve and appropriated to provide for pensions and death benefit, or either of them, or for analogous purposes under appropriate regulations" (R. VIII, 4821).

serve account applicable to the leased telephone instruments, remaining after their sale to the Licensees in 1927 R. VI, 4024). No subsequent transfers to the Reserve for Contingencies have been authorized (R. II, 1089).

The Executive Committee, composed of directors, acted for the Board of Directors (R. VIII, 4834). The purpose of the Reserve for Contingencies and of the specific additions thereto was not stated in the Minutes of the Meetings of the Executive Committee (R. VIII, 4760-1). The Minute Book of the Board of Directors was not produced and access to it was refused Appellants (*supra,* 189) on the ground, as claimed by Appellee, that Appellants' demand therefor "is a plain fishing bill."*

Mr. Heiss, who entered the employ of the American Company in 1913 and became its Comptroller in 1920 (R. I, 819), but who never has been a director, testified over

* Plaintiff's Brief in Opposition to Defendants' Motion of November 3, 1931, pages 6-7 (R. III, 2493-4), stated:

"(a) **Defendant's demand for the minute books of the plaintiff and of the American Telephone and Telegraph Company is a plain 'fishing bill.'**

"In their motion, defendants demand the right to an 'inspection of the minute book of the Board of Directors of the Illinois Bell Telephone Company and of the Board of Directors and Executive Committee of the American Telephone and Telegraph Company cov-'ering the years 1923 to 1930. (Motion paper, page 1 and page 36.)

"The only foundation for this demand which we have been able to find in defendants' voluminous papers is the following statement on page 37:

" 'Relevancy. An important method to determine the policies of plaintiff and of the A. T. & T., the real operator of the facilities of plaintiff, is by examination of the record of the proceedings wherein these policies were formulated. The policies are pertinent in the determination of the extent to which they are intended for the benefit of the utility service or the non-utility service of each company, and the extent to which the expenses and expenditures charged to the utility service in fact are incurred in connection with or for the benefit of the non-utility service. Without these records defendants and this court will be hampered and must depend upon the representations of plaintiff without verification.'

"The above statement of defendants shows affirmatively that with respect to the minute books of the two companies their application is a 'fishing excursion' pure and simple and in plain violation of the restrictions which the courts have uniformly put upon discoveries under Equity Rule 58 or under a bill of discovery."

Appellants' objections that "this reserve for contingencies was determined upon by myself and the President and was set up by the Executive Committee" (R. II, 1166); that regularly each year, beginning with 1919, the American Company had made substantial transfers to this contingency reserve. He stated that the controlling factor in the establishment of this large contingency reserve was the apprehension of the directors of the company that there might be large losses incurred in connection with patent suits; that this apprehension was aroused largely because of the great activity in the development of electrical communication following and resulting from the War and the great number of patents which had been taken out in the field of electrical communication (R. II, 1088, 1089).

Mr. Heiss stated that there were no further additions to the Reserve after January, 1928, because $14,395,000 then transferred was considered sufficient to provide for several years (R. II, 1089). Mr. Heiss in his exhibits and for the purpose of this case spread the $14,395,000 appropriation over the period 1927 to 1931 inclusive* (R. II, 1089, 1167; R. V, 2980c).

Mr. Heiss' testimony is the only evidence in the record to support the District Court's finding that "The American Company provided for meeting such possible losses by setting up a contingent reserve over the period from January 1, 1923 to January 1, 1932" (R. III, 2510).

But the record shows:

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*Mr. Heiss distributed the $14,395,000 over a four-year period to the end of 1931 because he knew "it was the intention that it should cover for several years the provision that we felt ought to be made for contingencies" (R. II, 1089). *Sed quaere* if the hearings had continued another year—would the "several years" include 1932; or if the hearings had ended in 1929 would the "several years" have ended then? The opportunistic character of Mr. Heiss' testimony appears *infra*, 206.

During the period 1900 to 1918, inclusive, the American Company appropriated from 39% to 66% of the current surplus earnings after dividends to a Reserve for Contingencies; the appropriations for the period aggregated $43,268,477, representing 50% of the period's surplus earnings (Appendix, p. 52). But during the period 1900 to 1918, inclusive, the American Company had no obligation to Western or to the Associated Companies, to cover patent infringement liability in the use of telephonic appliances recommended by the American Company and embodying the several thousand patents owned or controlled by it (*supra*, 196).

In 1910 the American Company stated the purpose of the appropriations for Contingencies to be:

> "To make adequate provision for future contingencies it would seem to be plain that in an increasing business there must also be an increasing reserve.
>
> * * *
>
> Reserves are a provision for deterioration and obsolescence of plant beyond that which can be covered by current maintenance and current replacements, and also *for deterioration of assets and for fluctuations in gross and net revenue caused by varied* business conditions'" (O.R. VII, 2451. Italics ours).

During the period 1919 to 1926, inclusive, the American Company appropriated from 13% to 55% of the current surplus earnings after dividends to its Reserve for Contingencies; the appropriations for the period aggregated $37,000,000, representing 25% of the period's surplus earnings (Appendix, p. 53). In addition the American Company transferred in January, 1928, to its Reserve for Contingencies the $14,395,799 on leased telephone instruments remaining after their sale to the Associated Companies in 1927 (R. VI, 4024).

Other than the testimony of Mr. Heiss, nothing appears to indicate that there was an abandonment in 1919, or thereafter, of the purpose stated in 1910 for the Reserve for Contingencies. On the contrary the following facts confirm the continuance of such purpose to date.

The financial statements of the American Company to the end of 1911 showed the Surplus, Reserve for Contingencies, and Reserve for Depreciation on telephone instruments and Long Lines Plant as one item; thereafter to 1930 the Reserve for Depreciation and the Reserve for Contingencies were shown as one account and separated from the surplus account.* Beginning with 1930, the Reserve for Contingencies was shown as a separate account from the Reserve for Depreciation (R. V, 3346). As of December 31, 1930, the amount shown in the Reserve for Contingencies was $64,664,444.18 (R. V, 3346). How much it was on December 31, 1918, the record does not show. The net amount of $15,602,033 was withdrawn and charged against the Reserve for Contingencies from 1900 to 1929, inclusive, including the $1,000,000 withdrawn in 1925 and added to the Employee's Benefit Fund Reserve (*supra,* 201; R. VIII, 4824). That such large withdrawals were not made to satisfy judgments or claims of patent infringements is evident from the history of patent litigation as told by the American Company's witnesses (*infra,* 211). How and when the other withdrawals were made which were charged to the Reserve for Contingencies, the purpose thereof and the portion thereof withdrawn and charged during the period 1919 to 1932, inclusive—all relevant facts—can be found, if at all, in *the Minute Books of the Board of Directors* of the *American Company* which were not

*O.R. VII, 2483, 2485, 2675; R. V, 3292, 3299, 3307, 3318, 3323, 3331, 3339.

produced and access to which was refused Appellants by Appellee and by the District Court (*supra,* 189, 202).

Neither in the exhibits offered by Mr. Heiss in the Michigan Telephone litigation in 1929 (R. I, 1000; R. VI, 3769), nor in the Ohio Telephone litigation in 1932 (R. I, 1001; R. VI, 3772a-b, 3773-4), nor in the exhibits prepared by him and sent to Appellants prior to the hearings (R. VIII, 4505) in which he testified, did he show the Reserve for Contingencies as having application to patent infringement liability, or any specific items to cover such liability.*

Significant it is that in his testimony and in the exhibits offered in connection therewith at the 1932 hearings herein (R. V, 2980a-c), Mr. Heiss considered that the American Company's liability arising from its patent protection obligation for the entire period 1923 to 1932, inclusive, was

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*A glimpse behind the scenes reveals the following illuminating situation covering Mr. Heiss' testimony in the final hearings herein in 1932:

Mr. Heiss testified:

"* * * for 1931 in Ohio I used $2,500,000 and here I used $750,011. The last year is not comparable, because I have excluded there the factor in connection with the large amount of money which we had available in New York, and which I did not charge up against the license contract.

Q. But the difference of that factor is an additional $700,000 there?

A. I think it amounts to $700,000 or more, but it all goes to show, Mr. Goldstein, my conservatism in the Ohio case where I was on my own.

Q. Yes.

A. And in this case I was at the mercy of my attorneys, and I had to make the deductions as they outlined the specifications.

In connection with the Ohio case, I discussed the matter (but not the deduction) with the heads of the departments. As I said a while ago, this matter of separating expenses here, license contract expenses from other expenses, was quite a mystery, and the department heads could not tell me very much" (R. II, 1175-6).

Mr. Heiss testified also:

"Now another factor in Michigan was the difference in the cost of money. At the time, in 1928, when I hadn't much experience in this matter, I was told in conjunction with our people to set up the money costs in the way that I described. Now, that will make a difference of two or three million dollars.

"We had a method which I used in 1928, and I saw fit to change that method, after mature consideration, for these present cases" (R. I, 1002).

predicated on "Section 2 of the License Contract," which of course did not go into effect until September 25, 1930.

In the light of the above facts, Appellants submit that Mr. Heiss' version of the purpose of the transfers to the Reserve for Contingencies as transfers to a Patent Liability Reserve should be disregarded. The District Court's finding based thereon is unsupported by any facts in the record.

Assuming, however, that his version is given credence, the transfers should not be considered as creating a Patent Liability Reserve having application to the American Company's obligation to Appellee under Section 9a of the 1919 License Contract, because such Reserve for Contingencies was not circumscribed by the following essentials to make it of practical benefit to Appellee:

(1) The funds in the Reserve were not trusteed for the benefit of Appellee and others similarly situated;

(2) Withdrawals from the Reserve were not limited to such only as had application to the subject matter of patent protection—witness the withdrawal in 1925 to the Employees' Benefit Reserve (R. VIII, 4821);

(3) The Reserve was not protected against clearance to Surplus and distribution as dividends to stockholders —witness Western's action in 1927 in respect to its Reserve (R. VIII, 4880a; R. I, 475);

(4) The Reserve was not protected against claims of creditors of the American Company.

DISCUSSION AS TO CONTENTION NUMBERED III.

III.

THE AMOUNT OF THE APPROPRIATIONS TO THE RESERVE FOR CONTINGENCIES CAN NOT BECOME THE MEASURE OF COMPENSATION TO THE AMERICAN COMPANY FOR THE BENEFITS OF ITS OBLIGATIONS FOR PATENT PROTECTION.

(1) For the reasons already stated, the full amount of a Reserve for Patent Infringement Liability established to protect the American Company against financial liability under its obligation created by Section 9a of the 1919 License Contract can not be used as the measure of premiums to be paid by the Associated Companies for that protection (*supra*, 200).

(2) The $14,395,799 balance in the Depreciation Reserve Account after the sale of telephone instruments in 1927, which was transferred to Reserve for Contingencies represents profit to the American Company on such sale. To such profit the American Company was not entitled. By the amount of this profit the American Company was unjustly enriched at the expense of the Associated Companies (*infra*, 231). To consider such profit as becoming a Reserve for Patent Protection beginning with 1927 and for five years thereafter and to charge the Associated Companies the amount thereof would be to unjustly enrich the American Company at their expense *a second time by the* same amount of $14,395,799 through the device of a bookkeeping transfer from one Reserve to another.

(3) For the reasons already stated, the charge to License Contract payments of the entire amount of the

appropriations to a Reserve for Patent Infringement Liability unjustly enriches the American Company to the extent of the portion thereof applicable to:

(a) the bonus stock and the earnings thereon received by the American Company from Western for the license to manufacture and sell to the Bell System telephone appliances recommended by the American Company embodying its inventions (*supra,* 168).

(b) the earnings on the American Company's investment in Western, as the manufacturer of such appliances (*supra,* 169), and

(c) the added protection which such Reserve gives to the American Company's investment in the Associated Companies. The fact that the American Company as the investor in Appellee can protect its investment therein against impairment through Appellee's use of patents and apparatus at the expense of Appellee in manner and amount determined by the American Company is an advantage of additional security not received by the ordinary investor from ordinary business undertakings of similar risks and uncertainties. But Appellee's showing and the District Court's findings on Fair Return based thereon were predicated on the existence of the ordinary investor relationship between Appellee and the American Company (R. I, 202-5; R. III, 2514; *infra,* 528).

(4) To give Western a clear field to embody in telephonic appliances patents recommended by the American Company, the American Company pursued the policy of (a) purchasing patents (R. II, 1217), (b) purchasing licenses (R. II, 1218), (c) exchanging licenses and patents (R. II, 1217). The direct payments for patents during the period 1923 to 1931 was $1,601,754, plus a portion of the

legal expense incurred in connection therewith of the total legal expense of $1,842,614 (R. I, 913). Prior to 1923 the American Company followed the same purchase policy incurring also large expenses (R. II, 1217-19) all of which Appellee has included as part of the "Legal Department" *expense* claimed as part of the *cost* of furnishing the license contract services (*supra*, 184). For the same purpose, Western spent during the period 1923-1930, inclusive, as much as or more than the American Company and such expense was currently charged during those years as part of Western's expenses to be covered by the sales price of its products (R. V, 3472-3).*

These direct expenses are in addition to the large expense of the Law Department of the American Company which Appellee included as part of the "Legal Department" expense to be covered by the license payment (*supra*, 184) and the large expense of the experts in the Bell Telephone Laboratories, Inc. for investigation to minimize the risk of infringements, which expense is covered by Western sales price of its products (R. I, 514-5). Similarly one of the purposes of the huge expenditures for Development and Research was to keep ahead of the art and prevent the necessity of paying tribute to outside patentees (R. III, 2157).

It is significant in this connection to note that from the War to 1923 the American Company and Western had by contracts and licenses—

(a) procured a clear field for the use in wired telephony of inventions in radio through the General Electric Company contract of July 1, 1920, and its extensions already noted (*supra*, 135);

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*Prior to 1923 Western charged its large purchases of patents to its Reserve for Contingencies (R. VIII, 4880a), but the District Court allowed their charges as current operating expenses.

(b) procured a clear field in the telegraph field through exchange of licenses in 1923 with the Mokrum Company (R. VIII, 4841);

(c) procured a clear field in respect to machine switching patents which represented the big development in telephonic appliances for the Associated Companies during the period under investigation by arrangements with Automatic Electric Company (R. VIII, 4847), with Kellogg Switchboard & Supply Co. (R. V, 3709) and with Stromberg-Carlson Mfg. Co. (R. V, 3704) and with individuals controlling important patents (R. II, 1216).

It is such *insurance* which furnished the real protection to the American Company, to Western, and to the Associated Companies against the possibility of infringement liability (R. II, 1217-18).

That the risk of patent infringement liability could be eliminated without *serious loss* to the *American Company*, is evidenced by the history of the American Company and Western since 1900. With more than thirty years of telephonic history to draw on, no payment was shown to have been made by the American Company or by Western of any substantial amount of damages or expenses growing out of their respective patent infringement liabilities (R. II, 1213). With thirteen years' history since the War no substantial payment was made although the number of patents and applications has doubled since 1918. The record discloses a suit in 1900 involving switchboards which was disposed of (O.R. III, 1011), and a claim in respect to telephone instruments which was settled for a few hundred dollars in 1915 (R. II, 1218). The pending suits by Kellogg Switchboard and Supply Company, which Appellee emphasized, are illuminating (R. II, 1219). In the first place the

suits covering straight-forward trunking and the use of number 11 switchboards* have already been determined in favor of the American Company (*Kellogg Switchboard and Supply Company* v. *Michigan Bell Tel. Co. and American Tel. & Tel. Co.*, 2 Fed. Supp. 335 (1932). In the second place, the proposal for settlement illustrates the folly of permitting the American Company to set up a reserve as a financial protection against patent infringement liability at the expense of the Associated Companies. According to the American Company, the Kellogg Company offered to settle on the basis of $5,000,000 in cash, the grant of a non-exclusive license under certain American Company's patents and the agreement of the American Company to purchase the manufactured products of the Kellogg Company and to pay therefor the cost plus 20% (R. II, 1219). As the Kellogg Company is a manufacturer of telephonic appliances already doing business through Western with the Bell System (R. V, 3739) and as the development and research expenses of developing patents is paid for by the Associated Companies (Appendix, p. 73), the settlement would, in effect, mean (a) the payment by the American Company of $5,000,000, (b) the grant of license to use patents developed at the Associated Companies' expense and (c) an increase in purchases by the Associated Companies from the Kellogg Company through Western (O. R. IV, 2070). By so doing, the American Company would escape the major portion of the liability.

*However, no number 11 switchboards are used in the Chicago area (R. II, 1317).

(5) Under the 1919* and 1930** License Contracts the American Company has the right to assign its obligations to an assignee (even of nominal or no financial responsibility), and by so doing to release itself of further obligations under them. The American Company does not obligate itself to assign, transfer or make available to the assignee the reserve, even if properly created, to cover possible infringements during the service life of the apparatus subsequent to the date of assignment. A reserve, therefore, built up in excess of the amount required to meet the infringements to the date of assignment or appropriations made, as in 1927, but claimed to cover protection against the *risk of future years;* furnishes no *legal protection* to the Associated Companies, and if reimbursed to the American Company, is without consideration and unjustly enriches it at the expense of the Associated Companies.

*Section 13 of the 1919 License Contract provides (O.R. IV, 1214):

"If the licensor shall transfer to any party who shall agree to perform the stipulations hereof, its title to the telephones furnished and licensed hereunder and the patent rights under which they are licensed, and its then existing rights hereunder, the provisions hereof shall inure to the benefit of and be binding upon such party in respect of all things done or to be done after such assignment, as if it were named a party hereto, and the Licensor shall no longer be responsible hereunder."

**Section 13 of the 1930 License Contract provides (R. V, 3008):

"If the Licensor shall transfer to any party who shall agree to perform the stipulations hereof, its title to the patent rights under which telephones and apparatus are licensed herein, and its then existing rights hereunder, the provisions hereof shall inure to the benefit of and be binding upon such party in respect of all things done or to be done after such assignment, as if it were named a party hereof, and the Licensor shall no longer be responsible hereunder."

DISCUSSION AS TO CONTENTION NUMBERED IV.

IV.

THE DISTRICT COURT'S FINDING THAT THE ENTIRE AMOUNT OF CHARGE TO LICENSE CONTRACT PAYMENTS TO COVER PATENT PROTECTION SHOULD BE ALLOCATED TO OPERATING EXPENSE AND NO PART THEREOF TO FIXED CAPITAL ACCOUNT, UNDULY BURDENED APPELLEE'S CUSTOMERS TO THE EXTENT OF AT LEAST 40% OF SUCH CHARGE DURING THE YEARS 1923 TO 1931, INCLUSIVE.

The Stromberg-Carlson Manufacturing Company (R. VIII, 4662) and the Automatic Electric (R. VIII, 4613, 4617) guaranteed Western and the purchasers of the latter against patent infringement liability on patents embodied in the apparatus manufactured by them and sold to Western for resale, including sales to the Bell System. In the case of the Automatic such apparatus involved machine switching equipment, the Bell System purchases of which were in excess of $40,000,000 to 1932 (R. V, 3739). In each case the manufacturers' sales price included the premiums, if any, to cover insurance against patent infringement liability (R. VIII, 4663, 4616, 4622). In each case the purchases by Appellee were on the recommendation of the American Company (R. II, 1211).

Independent telephone companies are indemnified by Western against patent infringement liability on the same telephonic appliances which Western sells to Appellee without any indemnification (R. II, 1076, 1169; R. VIII, 4662, 4617).

Purchases of telephonic appliances whether manufactured by Western or by other manufacturers are recorded in the construction accounts except as to the small percentage thereof applicable to maintenance and other expense accounts (*supra,* 171 *et seq.*). When recorded on the construction accounts such price, including the portion thereof applicable as premium for patent protection, is amortized over the service life of the item involved, if purchased by Appellee from manufacturers other than Western.

But the District Court allocated as an operating expense the premium paid through the License Payment to the American Company to cover patent protection on appliances which go into fixed capital. By so doing it amortizes the entire premium in the year in which it is paid. There is no reason for this difference in treatment.

Account 527 of the Uniform System of Accounts in force since 1913 and covering the License Payment as an operating expense (*supra,* 172) does not cover the patent protection provisions of the License Contract, as they did not come into being until 1919 (*supra,* 119).

The Uniform System of Accounts was intended to *have uniform application to all telephone companies of the same class and to the same operations of all companies.* The Uniform System of Accounts does not require that every part of the License Payment be included as an operating expense (R. VIII, 4473). General Expense Account 668 covering "Insurance" contemplates that premiums on insurance may be charged under certain circumstances to fixed capital account (R. VIII, 4475). As Appellee and other telephone companies charge premiums for protection against patent infringement liability to fixed capital account in the case of purchases other than of Western's manufactures no reason exists for making any difference in

treatment of such payment, if and when made through the License Contract payment by the Associated Companies to cover Western's manufactures.

If the License payment to cover patent protection were distributed among the fixed capital accounts and operating expenses in conformity with the recording of the purchase price of Western's manufactures, the existing telephone service charges for Intrastate business would be relieved to the extent of 41% of the charge made, and the attacked rates to the extent of 45% thereof (Appendix, p. 47).

If patent protection to Appellee is necessary, and if the charges were made to it in the manner that the Automatic Company and Stromberg Company make to Appellee and others and as Western makes to its non-Bell customers, the question of the reasonableness of the charge could be tested by the experience of manufacturers having similar risks, such as the manufacturers above mentioned, or the General Electric Company, the Westinghouse Electric Manufacturing Company and others similarly situated. By changing the character of the insurance, in scope, in method of payment and in method of accounting, Appellee has made it impossible for any one challenging the charge to present the experience of others and for reviewing authorities to use such experience as a standard of the reasonableness of the action under question. The record shows no facts to prove the reasonableness of the amount charged; the principle of law that the charge was an act of management being *prima facie* reasonable was never intended to have application to a situation where as here the party seeking the benefit thereof has made it impossible for those challenging the action to test the same by the ordinary standards applicable under similar circumstances.

Part V.

Considerations Received by the American Company Applicable as Additional Compensation for License Contract Services Not Considered by the District Court.

The American Company received from Appellee four considerations of value other than the License Contract payment, for which the District Court gave no credit, although Appellants made the request therefor (R. III, 2436, 2441). Appellee's request for findings on License Contract provided that all offsets and credits be given effect in connection therewith (R. III, 2416). The District Court's opinion and findings on License Contract made no mention of and gave no effect to any credits or offsets (R. III, 2509-12; 2519-20). For the District Court's failure so to do, Appellants assigned error (R. III, 2570-72) and in support of their position offer the following:

SUMMARY STATEMENT OF APPELLANTS' CONTENTIONS.

I. The American Company did not reimburse Appellee for its expenses incurred in the direct distribution in Appellee's territory of the American Company's new issues of securities.

II. Appellee received no credit for financing the Central Union Properties to liquidate $17,500,000 frozen assets of the American Company and to relieve it of incurring further losses in connection therewith.

III. Appellee received no credit for the surrender of its right under Section 10 of the Original License Con-

tract of 1881 to participate in the receipts and profits of the long-distance business in Chicago as part consideration for the License Contract arrangement in effect during the period of the litigation.

IV. Appellee received no credit for its proportion of the $14,395,799 profit made by the American Company in 1927 on the sale to the Associated Companies of the telephone instruments theretofore leased to them.

DISCUSSION AS TO CONTENTION NUMBERED I.

I.

THE AMERICAN COMPANY DID NOT REIMBURSE APPELLEE FOR ITS EXPENSES INCURRED IN THE DIRECT DISTRIBUTION IN APPELLEE'S TERRITORY OF THE AMERICAN COMPANY'S NEW ISSUES OF SECURITIES.

Neither Appellee nor the District Court allowed Appellee credit for the expenses incurred by it in assisting in the sale of the American Company's stocks and bonds through (a) the sale of the American Company's securities to the public in Appellee's territory, (b) the buying and selling stock rights and taking stock subscriptions, and (c) selling the American Company's stock to Appellee's employees. Such expenses were charged by Appellee to operating expenses and allowed by the District Court as proper, to which findings Appellants assigned error (R. III, 2570).

APPELLEE'S SERVICES.

A.

Sale of American Company's securities to public.

For the period 1923-1930, inclusive, Appellee collected $27,382,749 for the account of the American Company covering partial payments from Appellee's sales of the American Company's securities to the public in Appellee's territory (R. VI, 3812); and the net remittances to the American Company during that period were $26,610,947 (R. VI, 3812). In 1931 $2,924,352 was collected by Appellee and $2,760,131 was remitted, such collections representing in the latter part of the year some payments by employees who purchased the stock as the same came below their Employees' Stock Plan subscription figures (R. II, 1266). Such sales to the public were made through Appellee's facilities and employees for cash or monthly payments.

B.

Buying and Selling Stock Rights and Taking Stock Subscriptions.

Beginning with 1924, Appellee used its facilities to enable the American Company to carry out campaigns for direct sales of the latter's securities to its stockholders in connection with stock offerings of 1924, 1926, 1928 and 1930 (R. V, 3216).

The facilities were used to help stockholders arrange to buy or sell their rights (R. V, 3192), and to contact stockholders to utilize their rights to subscribe or to cash in the value thereof (R. V, 3193). The Appellee's record

in these campaigns was among the best in the Bell System (R. V, 3198, 3193).

Such rights transactions alone involved $2,456,500 for the period (R. VI, 3812-3). The collections on stock subscriptions paid in full and installment payments on these four issues aggregated $5,899,134.43 (R. VI, 3812-3).

C.

Employees' Stock Plan.

During the period 1923-1931, inclusive, Appellee collected from its employees $22,989,482 for the account of the American Company to cover installment payments on stock purchases made by them through Appellee, and after making settlements with employees for repurchases, etc., remitted to the American Company the net amount of $16,738,169 (R. VI, 3812).

In 1923, 45% of the 23,831 employees of Appellee were subscribers to the Bell System Employees' Stock Plan in effect since 1914 (R. VIII, 4772-8; O.R. VI, 2031; O.R. VII, 2513 (17); O.R. VI, 2318); by the end of 1930 over 85% of the 29,600 employees were subscribers (R. VIII, 4800). By agreement with the American Company the sale of stock and collection and transmission of all proceeds thereof were through Appellee's facilities (*Idem.*). In 1923, 38,037 shares were under subscription (O.R. VI, 2318); at the end of 1930, 113,621 shares were under subscription (R. VIII, 4800). In spite of the depression, 73.6% of the 26,475 employees were subscribers on December 31, 1931, to 80,911 shares (R. VIII, 4800). During the period 1923-1931, inclusive, there were issued to employees over 125,000 shares of the American Company fully paid up (O.R. VI, 2318; R. VIII, 4800).

D.

Total Remittances.

The total remittances by Appellee derived from sales of the American Company's securities were $52,008,382.25 for the period 1923-1931 (R. VI, 3812). This amount was 59% (R. VI, 4027) of the $89,418,000 paid by the American Company to Appellee in purchasing Appellee's stock offerings during the same period.

COMPENSATION TO APPELLEE FOR SELLING AMERICAN COMPANY'S SECURITIES.

A.

Employees' Stock Plan.

For selling American Company's stock to its employees Appellee received neither compensation nor reimbursement of expense (R. II, 1258). Appellee estimated that the cost to it in the Chicago Division of rendering such service to the American Company during the period was from $29,701 to $45,263 per year (R. VI, 3809).

But analysis of these figures reveals that:

(a) No record was kept of the time spent by employees on the work. The computation is based on 1932 estimates of what time was spent as far back as 1923 (R. II, 1259). Such estimates were made for the purpose of this case by employees, all or practically all of whom were doing so in their adverse interest, as stockholders of the American Company.

(b) No portion of the general administration or other executive department expense was charged as part of the

costs representing general supervision similar to the supervision claimed by Appellee for the President and other Executives and administrative officials of the American Company in relation to License Contract services (*supra*, 187).

(c) In computing the allocable portion of the annual charges for facilities, Appellee considered only the particular space occupied by the employees working on such sales plan and then only on the basis of *book cost valuation*, without giving effect to the Reproduction Value of the property and without giving effect to Going Value. (R. II, 1258).

B.

Selling Securities to the Public.

From 1923 to 1928, inclusive, Appellee received $9,000 a year, $5,700 to cover accounting service and $3,300 to cover commercial services such as collections, etc. Beginning with 1929 the compensation has been $3,600 a year (R. VI, 3811). This compensation was apparently to cover the *entire company* operations (R. VI, 3811). Where Appellee mailed circulars or annual reports of the American Company the incidental expenses in connection therewith were also billed (R. II, 1261).

Appellee estimated that its cost in the Chicago Division of handling this work for the period was from $15,100 to $19,600 per year (R. VI, 3810).

After deducting the compensation (apparently the full company amount), and reimbursement of the miscellaneous expenses of mailing Appellee's estimates, Appellee estimated its net cost in the Chicago Division for which it re-

ceived no reimbursement was from $6,800 to $19,700 per year (R. VI, 3810).

These computations were made on the same basis and in the same manner as in the case of the estimated costs of administering the Employees' Stock Plan (R. II, 1260), and are subject to the same objections that (*supra*, 221):

(a) The estimates were made in 1932 by interested employees, with no records available from which their representations can be checked.

(b) No Going Value was given effect.

(c) No reproduction cost value was given effect.

C.

Sales of Stock Rights and Subscriptions.

Appellee did not charge nor has it estimated the cost to it of using space in connection with these transactions nor any overhead, such as it included in connection with its estimates of costs of selling stock to the public (R. II, 1262). It was reimbursed only the direct expense of making contacts and reporting (R. VI, 3811).

Conclusion.

On the assumption that the American Company is a *contracting party* to render service to Appellee under the license contract without reference to the American Company's investor relationship—there is no more reason why the American Company, without adequately compensating Appellee, should get the use of the benefit of Appellee's organization and facilities than if the United States Steel Corporation should arrange to have its stock sold by Appellee to Appellee's employees (R. I, 989). Indeed,

viewed from the telephone subscribers' viewpoint, the sale of the American Company's securities represents a *loss* in the sacrifice of loyalty of Appellee's employees to Appellee's own interest in their daily and intimate contact with the American Company's Long Lines operations using the facilities of Appellee in the long distance service. With a large portion of Appellee's property and personnel in the telephone operations of both parties; with allocation of joint expenses and joint uses of property dependent entirely on the judgment of Appellee's employees; with the physical impossibility of check in most instances and with the lack of available data to check in many instances the judgment of such employees,—the *loyalty* of Appellee's employees to Appellee is the only assurance which Appellee's telephone subscribers can have that Appellee's interest will not be sacrificed in any case in which the interest of Appellee and the American Company conflict or are adverse.

DISCUSSION AS TO CONTENTION NUMBERED II.

II.

APPELLEE RECEIVED NO CREDIT FOR FINANCING THE CENTRAL UNION PROPERTIES TO LIQUIDATE $17,500,000 FROZEN ASSETS OF THE AMERICAN COMPANY AND TO RELIEVE IT OF INCURRING FURTHER LOSSES IN CONNECTION THEREWITH.

The downstate properties of Appellee were acquired on December 1, 1920. They were part of the properties of the Central Union, a licensee of the American Company.

In 1913 there was owing to the American Company from the Central Union $34,303,000. The Central Union then had outstanding $5,450,000 capital stock, against which there was an impairment of capital account in the amount of $4,600,000. From 1914 to 1919, the properties were operated by receivers (R. I, 418). During the period of the receivership, its properties were operated at a loss (O.R. I, 578-9), and by April 30, 1919, the impairment of its capital account had increased to $11,900,000 and by December 31, 1919, to $13,990,000. In the course of the receivership, the American Company also agreed to hold in suspense the 4½% license payment currently due to it under the Central Union License contract (O.R. VI, 2125).

On the latter date the American Company owned $5,400,000 of capital stock, all of which had been wiped out (O.R. I, 580), and held $56,117,000 credit obligations (O.R. I, 580, 584-5).

During the year 1920 the American Company effected a reorganization of the properties of the Central Union by selling portions thereof to Appellee, to the Indiana Bell Telephone Company, and to the Ohio Bell Telephone Company (O.R. VII, 2608, 9 (29, 31)).

The sales price in 1920 of the Central Union properties to the three Associated Companies was sufficient to pay off the entire indebtedness to the American Company in the amount of $60,472,000 (O.R. I, 596), and sufficient to restore its entire capital account at $100 a share for 54,000 shares, and to create a surplus of $1,360,000 (O.R. I, 593).

The purchase price by Appellee was represented by $15,000,000 in notes with expressed maturity in 1923, when the mortgage indebtedness of $19,000,000 on its own property, created in 1909, likewise matured. The

notes were paid off in cash in 1923 out of the proceeds of its new and refunding bond issue of $50,000,000 (O.R. V, 1610; O.R. VII, 2609 (32)). The transfer to Appellee of the title to the Central Union properties was a paper transfer insofar as the American Company was concerned, as it owned 99% of the stock of both companies (O.R. VI, 1982, 2283). The sale to Appellee resulted in a reduction in the capital deficit of the Central Union in the amount of $3,700,000 (O.R. I, 590), and liquidated $13,800,000 of indebtedness to the American Company (*Idem.*).

In paying off the purchase money obligations in 1923, Appellee rendered the following financial services to the American Company during the period under investigation:

(a) using the credit of Appellee to liquidate to the American Company $13,800,000 long past due indebtedness and accumulated interest from the Central Union which had been impaired and which could not be liquidated upon the credit of the latter company:

(b) using the credit of Appellee to permit the American Company to withdraw in cash more than the entire amount of its capital investment in the Central Union properties transferred to Appellee, which prior thereto had been wiped out, and on which it had not received any return for many years. But although the American Company withdrew its capital investment, it still retained the same interest in the future earnings of the properties conveyed to Appellee through its ownership of 99% of the stock of Appellee. On the other hand, the American Company did not withdraw its capital investment in the properties sold to the Indiana Bell Telephone Company and to the Ohio Bell Telephone Company, as it took stock from them for part of the purchase price (O.R.

VII, 2608-9 (29, 31)). From 1920 to 1925 the Indiana Bell paid no dividends on its capital stock and in 1926 paid 4% (R. VI, 4026). Nor did it pay interest to the American Company on the notes given in payment for the purchase for several years thereafter (O.R. VI, 1815-16). In 1924 the American Company cancelled $1,000,000 face value of such notes and $1,180,000 accrued interest (R. VIII, 4820). In 1925 the American Company cancelled $620,000 demand notes held by it, plus $1,180,000 past due interest (R. VIII, 4822). The amount so cancelled exceeded by $304,939 the entire license payments made by the Indiana Bell for the period 1920 to 1930, inclusive, and exceeded by $960,034 the license payments made by it for the period 1923-1931, inclusive.

The Ohio Bell paid no dividends in 1920, 6% in 1921, no dividends in 1922, 1% in 1923 and 3% in 1924 (R. VI, 4026).

(c) using the credit of Appellee to finance thereafter the Central Union properties conveyed to it in lieu of using the credit of the American Company, theretofore for many years the sole credit for that purpose.

In this connection, Appellants direct attention to the fact that at the date of the Central Union purchase it had a depreciation reserve of $3,504,340 (R. VII, 4075), or 22% of book investment (R. VII, 4076), applicable to the properties purchased. Appellee's purchase price wiped out that reserve; by the end of 1922 there was only $995,570 depreciation reserve applicable to the investment represented by the Central Union purchase or 5.43% of the book investment (R, VII, 4075-6).

The American Company's experts on Depreciation tell us regarding an adequate depreciation reserve account, that:

> "As business considerations, several advantages of the reserve account appear: An adequate reserve account appearing in the balance sheet is a sign that the integrity of the company's assets is being maintained. The appearance of the account in this way before investors assists the company to attract capital for extensions and betterments on favorable terms and as a result of these features, the depreciation reserve account assists a company to maintain service to its users with economy and in a high grade manner" (R. VI, 3802).

What then shall we say of the service which Appellee rendered to the American Company in 1923 and thereafter, when it enabled the American Company to clear the depreciation reserve of the Central Union as a profit and also have the use of Appellee's depreciation reserve on the latter's Chicago properties the largest per cent to book investment in the Bell System in 1922 (30.5%) and 1923 (29.4%) to window dress the Central Union balance sheet to attract capital to liquidate the frozen debts of the Central Union to the American Company? (R. VII, 4076.)

What then shall we say of Appellee's service to the American Company beginning with 1923 through the use of Appellee's showing of its depreciation reserves, which represented the largest or practically the largest per cent to book cost of plant of any Bell operating company, to window dress the financial sheets of the Central Union properties to attract capital for its needs, which prior to 1920 the American Company itself was required to do?* (R. VII, 4088a.)

Appellee's service to the American Company in the Central Union purchase balances and offsets any conceivable

*The depreciation reserve and amortization reserve account of the Chicago Division and of the Illinois Division (Central Union) for the period under investigation related to book investment was (See footnote following page).

service which the American Company could have rendered Appellee through the License Contract for which it was not otherwise compensated than through the license payment recommended by Appellee as proper.

DISCUSSION AS TO CONTENTION NUMBERED III.

III.

APPELLEE RECEIVED NO CREDIT FOR THE SURRENDER OF ITS RIGHT UNDER SECTION 10 OF THE ORIGINAL LICENSE CONTRACT OF 1881 TO PARTICIPATE IN THE RECEIPTS AND PROFITS OF THE LONG DISTANCE BUSINESS IN CHICAGO AS PART CONSIDERATION FOR THE LICENSE CONTRACT ARRANGEMENT IN EFFECT DURING THE PERIOD OF THE LITIGATION.

As already noted, under Section 10 of its Original License Contract of 1881, Appellee had the right to compensation from the American Company for the use by the latter in its long distance service of the Chicago exchange plant facilities—such compensation to be measured by a reasonable and suitable division of the receipts and profits of the long distance business originated and received in the territory of Appellee in Chicago (*supra*, 61).

	Chicago Division (R. VII, 4076)	Illinois Division (R. VII, 4076)
1923	29.37%	5.95%
1924	28.94	7.04
1925	28.25	3.96
1926	28.19	3.53
1927	28.78	2.77
1928	27.98	6.35
1929	26.70	5.75
1930	26.91	6.49
1931	28.11	8.24

The right which Appellee had was not the right which the other Associated Companies had under the standard form of contract. Only two other Associated Companies ever had such a right, and the record does not show that their right was preserved to 1919 as in the case of Appellee (*supra*, 66). Appellee's yearly settlements with the American Company since 1919 gave no effect to that right of compensation.

Measured by the part of the Chicago Exchange service revenues, which Appellee allocated to interstate toll service to cover the use of the Chicago Exchange plant facilities in that service, the value of Appellee's surrendered right would range from $350,000 to $650,000 per year (*supra*, 50). But such amounts would be minimum amounts as they do not give effect to the participation in the unreasonably large profits of the long distance service, as required by Section 10 of the Original License Contract (*supra*, 61).

To give Appellee credit on account of its surrender of rights in the long distance arrangement does not involve the difficulty of jurisdiction on grounds that the long distance service and the distribution of joint revenues is an interstate service. This Court held that in determining the question of the reasonableness of actions taken within the scope of intrastate commerce, an investigation may be made of actions taken in interstate commerce to measure the extent to which the actions taken in intrastate commerce are burdened thereby. (*Western Distributing Co.* v. *Public Service Commission*, 285 U. S. 119, at 125 (1932)). That Appellee's intrastate service would be burdened by its failure to receive compensation from the American Company, even though the interstate separation were made in compliance with the direction of this

Court, is clear from the fact that, to the extent that Appellee's cash resources would be increased by this compensation, Appellee would not require the services of the American Company in meeting its such requirements.

DISCUSSION AS TO CONTENTION NUMBERED IV.

IV.

APPELLEE RECEIVED NO CREDIT FOR ITS PROPORTION OF THE $14,395,799 PROFIT MADE BY THE AMERICAN COMPANY IN 1927 ON THE SALE TO THE ASSOCIATED COMPANIES OF THE TELEPHONE INSTRUMENTS THERETOFORE LEASED TO THEM.

On December 31, 1927, the American Company showed on its books a capital investment in telephone instruments, allocable to the Associated Companies, of $46,583,314 (R. VI, 4024), against which there was a balance in the depreciation reserve account aggregating $22,795,386, or 48.93% of the capital investment (R. VI, 4024).

The American Company, pursuant to authorization of its Executive Committee, sold to the Associated Companies, including Appellee, as of that date, the telephone instruments at prices specified therein (R. VIII, 4828). The selling price was established on the basis of current Western prices on new instruments less 20% (R. VI, 4024), and for all instruments sold to the Associated Companies was $38,183,727 (R. VI, 4024), of which $2,520,126 is allocable to Chicago Intrastate business. The profit of the American Company on this sale was $14,395,799, of which $917,076 is allocable to increase in price over un-

depreciated book cost, and $13,478,723 represents the unused balance in the depreciation reserve account on the sold instruments (R. VI, 4024). The profit allocable to Chicago Intrastate business is $726,540* (R. VI, 4024).

In December, 1927, Appellee recorded on its books in its fixed capital account, as part of the Station Apparatus Account, its investment in the telephone instruments allocable to Chicago at the price paid to the American Company (R. VII, 4076).

The total amount of this $14,395,799 represented profit to the American Company under its License Contract operations. The claim by Mr. Heiss that the balance in the American Company's depreciation reserve account after the sale in 1927 included $5,829,447 which had been transferred in July, 1912, from surplus to depreciation reserve account and such $5,829,447 transferred back to surplus in 1927 (R. I, 943), is contrary to the history of such depreciation reserve account dating back to 1884, as narrated in the Appendix (Appendix, pp. 48-51).

Such profit is available as compensation to the American Company for License Contract services not otherwise compensated for in the amounts claimed by Appellants to be proper.

*Effect has been given to reduction in depreciation reserve resulting from District Court's allowance of only 6% depreciation on instruments as compared with the American Company's charge of 7%.

WESTERN'S PROFITS AND PRICES.

Preliminary Statement.

With one modification applicable to 1930 and thereafter, the District Court's findings on Western's Profits and Prices followed Appellee's presentation thereof. The controversy between the parties in respect thereto is sharp and clearly defined, and embraces three classes of issues.

One class of issues arises from the difference in viewpoint on the precise question to which this Court's direction on this subject matter had application. Appellee's presentation and the District Court's findings have application to a question of abuse of intercorporate relationship to be viewed in the light of the permanent and continuous relationship of the parties over the entire period of the litigation and for the years prior thereto back to 1916.* Appellants' contentions have application to the question of confiscation for each year of the litigation based upon the use of Western's prices to arrive at the estimates upon which the charge of confiscation for each such year was predicated and sustained.

The second class of issues arises from the failure by the District Court to give effect to this consideration: Appellee made a presentation of the reproduction cost new estimate for each year of the litigation of the portion of the plant accounts covering Western's products, as the basis for the District Court's findings on Rate Base Value and Depreciation Expense Charges. In such

*Western, the New York Corporation, was organized in 1916 to take over Western, the Illinois Corporation, organized in 1881.

presentation, Appellee chose to make a different use of Western's prices than the use which it made of the same prices in the regular course of its business. Its reproduction cost estimate of each year of the litigation used and reflected only Western's *current prices of the year of revaluation and none other.* In its regular operations its book accounts in each year use and reflect the *composite of Western's prices over the period* covered by the purchases of Western's products in service in such year including the current purchases, which have been entered therein. The District Court's findings on the reasonableness of Western's profits were made, as it claimed, to cover Appellee's purchases from Western. Appellants' contentions are directed to the non-application of such findings to justify the use of *only current prices* for the particular purposes which Appellee chose to make of them at the 1932 final hearings in this case.*

The third class of issue arises from the failure by the District Court to give effect to this consideration: The District Court's determination of what it designated as "rate of earnings on its investment in Bell business" was predicated on the separation of Western's total expenses of operation and manufacturing facilities between Bell and non-Bell business on the basis of "standard shop costs"** of their respective sales, which separation could not possibly produce the result claimed for it, but which separation, if adopted, unduly burdened

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*At the 1929 hearings Appellee's presentation and the District Court's findings on Depreciation Expense Charges were based on book cost figures as the base to which the depreciation rate was applied (O.R. I, 191, 198; O.R. IV, 1195).

**The standard shop costs, explained in detail, infra, 248, are assumed labor, material and overhead costs of individual items of manufacture used as part of Western's accounting system, to measure, among others, the efficiency of its manufacturing operations.

Bell business for the benefit of non-Bell business; gave effect in arriving at "net earnings" to deductions from gross income of items which, under applicable legal principles, are clearly not current operating expenses; related the net earnings, so determined, to an "average investment" which is so measured that it bears no relation either to the rate base used in determining the rate of return of regulated industries or to the rate base commonly used by business men and investors in determining the rate of earnings of unregulated industries; used the percentage figures so produced as the yardstick for comparison of Western's earning experience with the earning experiences of other industries upon incomplete data reported in Investment Manuals, which reports do not permit computation of percentage figures comparable to those used as the yardstick in such comparison.

Appellants' contentions are directed to show that Western's net earnings from Bell business, as determined by the District Court, are clearly excessive on the basis of their ability to provide for the payment of interest and amortization on money borrowed and to provide an excessive return to the American Company as the investor in the equity (capital and surplus) of Western applicable to Bell business in each of the years of the litigation; that such excessive return is increased if effect is given to the adjustments to such net earnings claimed proper by Appellants, and to the unjust enrichment of the non-Bell business at the expense of the Bell business resulting from Appellee's separation between them of Western's operating expenses; that on the basis of the District Court's findings it is impossible to determine the extent to which such excess earnings enter into the estimates upon which the charge of confiscation for each year of the litigation was sustained.

This Court's Direction.

This Court directed that findings be made of Western's profits from Bell business and from Appellee and of the reasonableness thereof in the light of the different uses made of Western's prices in connection with the estimates upon which the charge of confiscation was predicated for each year of the litigation, as found by the District Court (282 U. S. 133, 152-3). Such uses cover (a) the substantial purchases made each year by Appellee for its Chicago intrastate business, ranging from $1,400,000 to $3,990,000 attributable to maintenance and other expense charges included in the District Court's finding of proper operating expense each year; (b) the use of Western's current prices of each year of the litigation as a factor in the index number computations to measure the difference between the value of Appellee's plant for the Chicago intrastate business in 1911 plus the book cost of gross additions and retirements for each of the years beginning with 1912 to the date of revaluation, to produce the reproduction estimate in such year of the plant in service exclusive of land and buildings (R. I, 15-6, 30) —on the basis of which estimate the District Court predicated its findings on Rate Base Value and Depreciation Expense Charges for each year of the litigation.

What the District Court Did.

The District Court found that Appellee's showing of the percentage of Western's earnings on Bell sales, related to average investment,* to average investment less the

*The District Court defined "average investment" to include "plant and manufacturing facilities, merchandise, receivables and cash, less current accounts payable, all at cost to Western, except merchandise, which is cost or market, whichever is lower" (R. III, 2507).

amount of depreciation reserve account, and to such sales, was correct for each of the years 1916 to 1932, for that total period and for the period 1923 to 1932 inclusive, as follows (R. III, 2518):

	Profit on Sales	Earnings on Average Investment	Earnings on Average Investment Less Amount of Depreciation Reserve Account
1916	.5	.8	1.1
1917	2.3	3.6	4.4
1918	2.7	3.1	3.9
1919	3.4	3.9	5.0
1920	3.7	4.9	6.1
1921	7.7	8.7	10.7
1922	4.0	5.2	6.6
1923	3.4	4.8	6.2
1924	4.7	6.9	8.8
1925	7.2	10.2	12.9
1926	5.2	8.3	10.6
1927	6.9	10.4	13.6
1928	6.8	11.8	15.8
1929	4.8	9.1	11.7
1930	3.5	4.6	5.8
1931	5.0	4.2	5.6
1932	(3.9)	(2.3)	(3.3)
Period 1916-1932	4.5	5.9	7.6
Period 1923-1932	4.7	6.1	8.

The District Court found that Western's earning experience with the Bell System during the period under investigation fairly corresponded to Western's experience with Appellee during the same period; that Western's sales to Appellee for use in its entire business and for use in its Chicago area "have been a reasonably fair and representative cross section" of Western's sales to the Bell System (R. III, 2519). It found that Western's relationship to the Bell System was permanent and not casual; that mostly on account thereof, several factors entered into Western's operations making for variable earnings from year to year; that "it is, therefore, necessary in

arriving at what are reasonable earnings on investment and profit on sales in the Bell business of Western to take into consideration the results for a period of years, and not merely a single year" (R. III, 2507-8). It found that "Western's rate of earnings on its investment in its Bell business and on its investment less the amount of its depreciation reserve account has been substantially one-third lower" than those of other large manufacturing companies of comparable risks and hazards (R. III, 2508). It found that Western, because of its relationship with the Bell System, had no sales expense and no credit risk and manufactured more efficiently and more economically because of the advance estimates sent to it of Bell System requirements; that these advantages, however, were passed on to the Bell customers in the prices charged to them. It found that during the period 1921 to 1929 inclusive Western had made eight reductions and one increase in price to the Bell System, the net effect of which was to reduce the price level on December 31, 1929, to 58.3% of that on December 31, 1920; that on November 1, 1930, Western increased such prices 10.2%, which increase continued thereafter. It found that "Western's rate of profit on sales in its Bell business, as distinguished from earnings on investment, has been less than one-half of the rate of profit made on sales by other large comparable manufacturing industries." It found that except for the 1930 increase in prices, Western's profits and prices to the Bell System and to Appellee were reasonable; that in view of the general price trends during the years 1931 and 1932 the advance in prices in 1930 should be eliminated from the computations upon which the charge of confiscation is determined for those years (R. III, 2507-9). It found that Appellee assumed the burden to show and had shown that the prices

of goods sold by Western to Appellee, except for the 1930 increase, "were fair and reasonable"; that the prices of the apparatus manufactured and sold by Western to Appellee were no higher than prices received from the sale by other manufacturers to other purchasers; and that the net earnings of Western were not excessive (R. III, 2507-8). It found that the Associated Companies purchased substantially all their telephone communication equipment from Western; that Appellee's purchases chargeable to its construction accounts applicable to the Chicago area ranged from $8,100,000 to $17,350,000 per year during the period 1923 to 1931, inclusive, and its purchases chargeable to maintenance and other expense accounts from $1,440,000 to $4,500,000 per year of the same period (R. III, 2516-7).

To these findings Appellants assigned error (R. III, 2549-63), and in support of their position offer the following:

SUMMARY STATEMENT OF APPELLANTS' CONTENTIONS.

I. The District Court's findings on Western's rate of return from Bell business, separated from non-Bell business, produce fantastic results.

II. Appellee's separation of Western's total operating expenses between Bell and non-Bell sales as separate classes of business, on the basis of their respective "standard shop costs of sales" is in violation of law.

A. Western's standard shop costs bear no relation to the conditions under which its products are manufactured.

B. The gross variations between the actual and stand-

ard cost of entire production in each year are substantial and represent corresponding substantial variations in Western's profits from Bell sales and from non-Bell sales considered as separate classes of business.

C. Appellee's distribution of the gross variations of entire production each year between Bell and non-Bell sales on the basis of their respective standard shop costs of sales assumes but does not prove that each class of sales was a fair and representative cross section of their combined sales of each such year.

D. Appellee's distribution of the gross variations of entire production of each of the periods 1916 to 1932, inclusive, and 1923 to 1932, inclusive, between the Bell and non-Bell sales of each such period considered as a single unit of time on the basis of their respective standard shop costs of sales assumes but does not prove that each class of sales for each period was a fair and representative cross section of the combined sales of each such period.

III. Appellee's separation of Western's manufacturing facilities between Bell and non-Bell sales considered as separate classes of business on the basis of their respective "standard shop costs of sales" is in violation of law.

A. Appellee assumes but does not prove that the usage of plant facilities by items and classes of products follows their shop cost of sales.

B. Appellee assumes but does not prove that "shop cost of sales" and "cost of production" are synonymous.

IV. Appellee cannot avail itself of excuses of expediency and economy for not making a proper separation of Western's operating expenses and manufacturing facilities.

A. Appellee's use of Western's profits and prices in its presentation on the issues of rate base value, depreciation expense, maintenance expense, and fair return, for each year of the litigation and the District Court's findings based thereon are predicated on strict proof of proper separation for each of such years.

B. Appellee's justification would unduly burden its subscribers with the consequences of Western's failure to maintain its standard shop cost system responsive to the actual conditions of manufacture.

V. Appellee's allocation of Western's Development and Research expense between Bell and non-Bell business unduly burdened the former for the unjust enrichment of the latter.

A. The allocation to Bell sales of the portion of Western's Development and Research expense applicable to the four licensed manufacturers of its inventions unduly burdened such Bell sales.

B. The allocation to Western's Bell sales of the portion of its Development and Research expense applicable to its distributors for resale unduly burdened such Bell sales.

C. The allocation to Bell sales of the portion of Western's Development and Research expenses applicable to Products unduly burdened such Bell sales.

VI. Western's Rate of Return on total Bell sales cannot be related to its sales to Appellee in the same year on the basis of their relative purchases.

A. Proof was not and could not be made that Western's sales to Appellee in each year of the litigation was a fair and representative cross section of its total Bell sales of the same year.

B. The District Court's finding that Western's sales to Appellee over a period of years was a fair and representative cross section of Western's sales to all Bell customers in the same period makes possible only the relation of Western's average rate of return on Bell sales to its sales to Appellee during such period.

VII. The District Court's finding that it is necessary in determining the reasonableness of Western's return on Bell business "to take into consideration the results of a period of years and not merely a single year" precludes the determination of the reasonableness of Western's prices used in the estimates upon which Appellee's charge of confiscation for each year of the litigation was predicated and sustained.

VIII. The standards applied by the District Court to determine the reasonableness of Western's prices and profits on Bell business did not and could not determine their reasonableness for any one year or over a period of years.

A. The District Court's finding that Western's rate of profit on Bell business has been less than one-half of that made by other manufacturers proves nothing as to the reasonableness of its prices and earnings in such business for any one year or over a period of years.

B. The District Court's finding that Western's rate of earnings on its undepreciated and depreciated average investment in its Bell business "has been substantially one-third lower than" that of other manufacturing companies of comparable risks and hazards, proves nothing as to the reasonableness of its prices and earnings in such business for any one year or over a period of years.

C. The reduction in prices to its Bell customers during the period 1921 to 1929, inclusive, did not and could

not prove that Western's return from its Bell business on such prices before or after each such reduction was reasonable.

IX. Percentage figures related to Western's depreciated or undepreciated "average investment" in Bell business as found by the District Court have no significance whatsoever as a yardstick by which to determine the reasonableness of Western's earnings from Bell business for any one year or over a period of years.

A. The amount of reserve for pension fund should be deducted from gross assets in determining the investment on which to compute a rate of return to Western's investors.

B. The amount of notes payable to trustees of pension fund should be deducted from gross assets in determining the investment on which to compute a rate of return to Western's investors.

C. The amount of working reserves should be deducted from gross assets in determining the investment on which to compute a rate of return to Western's investors.

D. The amount of current notes payable should be deducted from gross assets in determining the investment on which to compute a rate of return to Western's investors.

E. The amount of cash from non-operating activities should not be included as part of the investment on which to compute a rate of return to Western's investors.

X. Western's net earnings from Bell business, as determined by the District Court, from the prices used in the estimates upon which the charge of confiscation for each year of the litigation was predicated and sustained, are excessive.

XI. Western's earnings from Bell business, as found by the District Court, are understated in each of the years 1924 to 1929, inclusive.

A. Appellee improperly deducted over $7,000,000 from current income of the years 1924 to 1927, inclusive, to make up the excess of original cost of plant in service over their prognosticated reproduction value during the ensuing ten to fifteen years.

B. Appellee improperly deducted $7,275,000 from current income for the years 1925 to 1927, inclusive, to make up under-accruals of the years prior to 1923 for its pension fund liability.

C. Appellee improperly deducted $1,831,000 from current income of 1928 to cover depreciation on machinery for the years 1924 to 1927, inclusive, in excess of the amount charged during such years.

D. Appellee improperly deducted against current income of the years 1924 to 1929, inclusive, $4,100,000 for depreciation on tools, furniture and fixtures in excess of the yearly amounts allowed by the Internal Revenue Department.

XII. The District Court's findings render impossible the determination of the extent to which Western's excessive returns entered into the estimates upon which the charge of confiscation for each year of the litigation was sustained.

A. The per cent of net earnings to Bell sales as found by the District Court does not and cannot measure the extent to which the prices used in the District Court's findings were excessive.

B. The District Court's findings do not permit determination of the extent to which the depreciation expense

allowance and rate base value as found by it were inflated by the excess profits of Western included in the prices used in arriving at such findings.

DISCUSSION AS TO CONTENTION NUMBERED 1.

I.

THE DISTRICT COURT'S FINDINGS ON WESTERN'S RATE OF RETURN FROM BELL BUSINESS SEPARATED FROM NON-BELL BUSINESS PRODUCE FANTASTIC RESULTS.

The District Court found Western's rate of return from Bell business related to "average investment," as defined by it, less the amount of the depreciation reserve account. Such rate of return compares with that derived from combined Bell and non-Bell business and from non-Bell business considered as a separate class of business, computed on the same rate base, as follows:

	Combined (Appendix, pp. 82, 83)	Bell (Appendix, pp. 84, 85)	Non-Bell (Appendix, pp. 70, 71)	
1916	4.0%	1.1%	14.3%	
1917	8.4	4.4	23.4	
1918	7.4	3.9	17.0	
1919	7.4	5.0	14.5	
1920	7.1	6.1	10.5	
1921	6.5	10.7	11.1	(red)
1922	7.2	6.6	11.4	
1923	7.9	6.2	18.9	
1924	9.3	8.8	13.3	
1925	10.8	12.9	3.7	(red)
1926	11.3	10.6	25.3	
1927	13.9	13.6	19.	
1928	16.8	15.8	28.9	
1929	14.3	11.7	38.1	
1930	6.0	5.8	10.2	
1931	5.3	5.6	1.4	(red)

For the years 1926 to 1930, inclusive, it is possible to compute from such rate of return so determined what Western's stockholders would earn on their equity investment (capital and surplus) after paying interest and amortization on money borrowed as follows (Appendix, p. 72):

	Combined	Bell	Non-Bell
1926	17.37	16.13	41.05
1927	22.40	21.87	32.54
1928	28.19	26.47	50.36
1929	24.34	19.83	65.75
1930	8.66	8.30	15.03

The contrast in Western's rate of return from the two classes of business,—in the light of the unreasonably large returns of Western's subsidiaries as distributors of Western's products during the same years (*supra*, 105, 121), and in the light of the relationship of the parties involved—produces a result in the instant case of the same fantastic character as that which this Court found in the *Missouri Rate Cases* (230 U. S. 474, at 501-2, 507), and in respect to which this Court there held that the party making use thereof to support a charge of confiscation must prove by "clear and convincing proof" the facts alleged as the basis thereof and the law alleged to be properly applicable thereto.

DISCUSSION AS TO CONTENTION NUMBERED II.

II.

APPELLEE'S SEPARATION OF WESTERN'S TOTAL OPERATING EXPENSES BETWEEN BELL AND NON-BELL SALES, AS SEPARATE CLASSES OF BUSINESS, ON THE BASIS OF THEIR RESPECTIVE "STANDARD SHOP COSTS OF SALES," IS IN VIOLATION OF LAW.

THE LAW.

To constitute a proper showing of the amount of property used and expenses incurred in one of two services using joint property and incurring common expenses, the method of apportionment of property and expenses must bear a reasonable relation to the realities of the situation (*Minnesota Rate Cases*, 230 U. S. 352 (1913); *Smith* v. *Illinois Bell Tel. Co.*, 282 U. S. 133 (1930). The determination of the amount of property actually used and the proper apportionment of expenses incurred in the two services is defective if made on any basis which assumes that the amount of property used and expenses incurred bear the same relation in both services to the unit of measurement employed as the basis of comparison between such services, when in fact the relation of property and expenses therein may differ (*Missouri Rate Cases*, 230 U. S. 474 (1913); *Minnesota Rate Cases, supra; Smith* v. *Illinois Bell Tel. Co., supra*). Before a particular unit of measurement can properly be employed as the basis of comparison between two services, there must be evidence to justify the conclusion that the relation of the amount of

property used and of expenses incurred to the unit of measurement is the same in both cases of services, or if there is a material difference, there must be evidence to show its nature and the extent of such variation (*Wood* v. *Vandalia R. Co.*, 231 U. S. 1 (1914)).

The District Court's Error.

The fundamental error of Appellee's separation of Western's operating expenses and manufacturing facilities between Bell and non-Bell sales, and the District Court's findings based thereon, lies in the assumption that their respective standard shop costs of sales bear the same relation to the expenses of operation and manufacturing facilities applicable to each class of business. Appellee offered no proof whatsoever in support of such assumption. The following discussion shows that it is contrary to Western's actual experience as known to Appellee.

"Standard Shop Costs."

The net earnings of Western on its total business, Bell and non-Bell combined, for each year under investigation, are available from its records. But no records are available to show such earnings for each of such classes of business considered as a separate unit of business or for each customer included therein.

The amount of Bell and non-Bell sales considered as separate classes of business is available for each year, but not the cost of sales. To determine cost of sales requires the totaling of the inventory on hand at the beginning of the year, plus the cost of production in the year, less the inventory on hand at the end of the year (R. II, 1651-2). Western's records show the actual costs of entire production each year, but not divided as to each item manufac-

tured or as to the portion thereof allocable to Bell and non-Bell sales considered separately.

But Western does maintain an accounting system of the "standard shop cost" of the individual items, which accounting system it has used for the purpose, among others, of measuring the efficiency of its manufacturing operations (R. I, 383).

Standard shop costs are made up of three estimated or assumed facts—first, direct labor cost; second, material cost; and, third, shop overhead, consisting of manufacturing costs other than direct labor and material, such as salaries paid to supervisors, changes, repairs, clerical help, depreciation, power and light, etc., which are estimated upon the basis of an assumed volume of business and operating conditions, and which become part of the standard shop cost by means of a "loading" applied as a percentage of the assumed labor hours (R. I, 511, 513). Standard shop costs are applied to over 100,000 separate piece parts which enter into more than 20,000 separate forms of apparatus, made from 18,000 different kinds, sizes and shapes of raw material (R. V, 3266; R. I, 375, 407). Prior to 1925, Western's manufactures were confined to telephone communication equipment sold to Bell and non-Bell customers. Beginning with 1925, Western has also manufactured and sold each year, for use in the non-telephone field, special commercial products, including aviation equipment, broadcast receiving and transmitting apparatus, phonograph recording and reproducing apparatus and talking motion equipment (R. IV, 2840A).

Western maintains as *constant* the assumed labor, material and overhead costs for each item from the date when they are established until revised, irrespective of and in spite of the current and actual fluctuations during the

course of manufacture of each or all of the three factors making up the standard shop cost of each such item (R. I, 383).

If the actual and assumed cost of production of each item were the same, it would be possible to determine the cost of Bell and non-Bell sales separately, on the basis of their standard shop cost of sales. But in fact the actual and assumed cost are not the same. The per cent of labor, of material and of overhead cost, which enters into the total costs of one item will not be the same as the per cent of each element of cost which enters into the total cost of another item (R. I, 378). The conditions as to each and all of these three elements are not the same, for any day, or month, or year (R. I, 378). Each customer does not purchase the same day or week or month the same number of kinds of manufactured products composed of the same number of piece parts to which the variation in labor, material and overhead of manufacture will have the same effect of increasing or decreasing the actual cost in relation to the standard shop cost of each piece part or of all piece parts making up such purchases (R. I, 378). Therefore, the variations between the actual and standard cost of labor, material and overhead will be different for each separate piece part and will be different for the products of each customer in each year (R. I, 378). The net effect of such variations in increasing or decreasing the actual compared with the standard cost of production will be different for the products of each customer or group of customers each year.

In determining for each year the actual cost of Bell and non-Bell sales considered as two separate classes of business, Appellee used their respective standard shop costs of sales which it adjusted by apportioning thereto their

respective proportions of the variations between the actual and standard cost of entire production. Such apportionment of variations was made on the basis of the standard shop costs of each class of sales.

Inventory adjustments due to revaluation of inventories were also apportioned on the basis of standard shop costs of sales. The actual cost of production and inventory revaluation (called Current Cost of Sales Before Interest and Expenses) represented more than eighty per cent of the entire operating expenses for each year (Appendix, p. 73). The remaining cost of doing business includes development, distribution and general expenses, interest and federal income taxes. Of these only a small portion are directly related and require no apportionment to Bell and non-Bell business; the balance was apportioned on the basis of standard shop cost of each class of sales. In the Appendix hereto (Appendix, p. 73) is reproduced Exhibit D19 (R. V, 3654A) showing the complete picture of Western's operating expenses divided between Bell and non-Bell business for each year, 1916 to 1930, inclusive. Appellants' attack relates to the figures appearing under the item "Current Cost of Sales Before Interest and Expenses."

A.

Western's standard shop costs bear no relation to the conditions under which its products are manufactured.

Standard Material Costs.

Western has allowed its standard material costs to remain constant for many years. To illustrate: The actual and standard costs of copper and lead have been (R. V, 3738; R. VI, 3904a-h):

COPPER.

	Standard Cost (Per 100 Pounds	Average Actual Cost (Per 100 Pounds)
1924	$18.00	$13.33
1925	15.00	14.49
1926	15.00	14.22
1927	15.00	13.35
1928	15.00	14.81
1929	15 00	18.03
1930	15.00	13.85
1931	15.00	10.40
1932	15.00	6.25

LEAD.

	Standard Cost (Per 100 Pounds	Average Actual Cost (Per 100 Pounds)
1918	$4.50	$7.45
1919	4.50	5.78
1920	4.50	7.92
1921	8 50	4.39
1922	5.00	5.50
1923	5.00	7.38
1924	5.00	7.92
1925	8.00	8.96
1926	8.00	8.42
1927	8.00	6.80
1928	8.00	6.30
1929	8.00	6.83
1930	8.00	5.60
1931	8.00	4.22

STANDARD WAGE SCALE.

Changes in the standard wage scale for piece parts fixed by Western are made only in intervals of from one to three years, irrespective of the current fluctuations in labor conditions and labor costs* (R. I, 383). The *con-*

*The fluctuations referred to in the text are not the graduated labor scale used by Western as a basis for compensation based on years of service or kind of labor performed, but the fluctuations due to the changes from time to time in the piece rate paid for the same operation by the same kind of labor having the same year of service.

stant labor wage which Western was using in March, 1932, and since 1929 as a basis for its standard shop costs of those years had been established in 1929 (R. I, 383).

STANDARD OVERHEAD.

As overhead becomes part of standard shop costs by means of a "loading" applied as a percentage of assumed labor hours, the amount of overhead applied as the component part of standard shop costs has no relation to the actual conditions of manufacture (R. I, 385).

B.

The gross variations between the actual and standard cost of entire production in each year are substantial and represent corresponding substantial variations in Western's profits from Bell sales and from non-Bell sales considered as separate classes of business.

Western's net earnings for each of the years 1916 to 1931, inclusive, from Bell and non-Bell business combined, as found by the District Court, and the gross variations for the entire production of each such year considered as a separate unit of time are (in thousands of dollars) (R. VI, 3892c-d):

	Net Earnings	Variations Total	Telephone Apparatus and Special Commercial Products Combined	Lead-Covered Cable	Supplies
1916	$ 1,852	$ 7,945	$ 2,529	$ 5,416	
1917	5,725	20,336	9,349	11,443	
1918	5,639	13,344	8,777	4,567	
1919	5,450	10,195	8,111	2,084	
1920	7,319	21,414	16,248	5,166	
1921	8,285	11,443	7,342	4,145	
1922	8,032	5,999	4,904	1,255	
1923	9,339	9,580	6,622	3,044	
1924	13,171	13,447	8,311	5,141	$ 255
1925	15,655	14,721	6,697	8,089	63
1926	14,594	17,334	14,251	3,315	
1927	18,023	14,251	10,646	4,217	464
1928	20,778	19,372	15,225	5,271	212
1929	24,498	32,967	30,798	5,406	1,389
1930	13,247	28,065	17,382	10,952	169
1931	10,881	32,875	16,400	16,066	409
1916-1931 Total	$182,488	$273,288	$183,592	$95,577	$2,961

In respect to the cost of Bell and non-Bell sales considered as separate classes of business, to each of whom less than the entire production is sold, the gross variations of entire production which increase cost may affect the products sold to one class and those which decrease cost may affect products sold to the other class. Corresponding variations would then occur in respect to Western's profits on the particular products and from their sales to each such class of business. As each dollar of variation increases or decreases the expense of producing the products to each class of business the effect of the variation is on the net profits of Western in respect to the class of business to which such products were sold.

As the percentage of gross variations of entire production subject to distribution ranged from 74.7% to 429.0% of Western's net earnings from Bell and non-Bell sales combined in the years under investigation (*supra,* 254), a small error in such distribution in any year of that period would substantially vary Western's net earnings in such year for each such class of business considered separately. To illustrate:

On the basis of the District Court's findings, Western's net earnings in 1929 from Bell and non-Bell sales combined were $24,498,000 and from each such class of sales considered separately, $17,999,000 and $6,499,000, respectively. Such separated net earnings were predicated on the proper distribution of $32,967,000 of gross variations applicable to the entire production of 1929 on the basis of $34,954,000 of such variations to Bell sales and $2,639,000 to non-Bell sales (R. VI, 3892c). A ten per cent error in such distribution to the Bell business would have increased or decreased the net earnings from Bell business by 19.4% and correspondingly decreased or increased the net earnings from non-Bell business by 52.6%. Western's rate of return from Bell business in 1929 of 11.7% as found by the District Court, would become 13.9% or 9.9% and the rate of return from non-Bell business of 38.1%, as found by the District Court, would become 58.1% or 18.1%. The rate of return related to Western's capital and surplus would be changed from 19.8% to 23.6% or 15.9% for Bell business, and from 65.7% to 100.2% or 31.2% for non-Bell business (*supra,* 246).

C.

Appellee's distribution of the gross variations of entire production each year between Bell and non-Bell sales on the basis of their respective standard shop costs of sales assumes but does not prove that each class of sales was a fair and representative cross section of their combined sales of each such year.

Appellee's employment of standard shop costs of Bell and non-Bell sales of a single year, to distribute between them the variations applicable to the entire production of the same year to arrive at the actual cost of such sales, assumes that the standard shop cost of the merchandise sold to each class of business in any single year bears the same relation to the actual cost of entire production during that year as the variations to bring the standard cost of production of such merchandise to their actual cost of production bears to the total variations applicable to entire production (R. II, 1604). Such an assumption could be possible only provided that the Bell and non-Bell sales during the year contained items of each and every kind of merchandise or in combinations which would bring about the same result—i. e., Bell and non-Bell sales were each a fair and representative cross section of their combined sales of the year.

Appellee made no such showing and the District Court made no finding in respect thereto. Such assumption is contrary to Western's actual experience. In no year did special commercial products represent one per cent of Bell sales; such products represented from 21.1% to 68.8% of non-Bell sales of the years 1923 to 1931, inclusive (R. IV, 2840a). The non-Bell customers of telephone communication equipment embrace retail customers plus jobbers

who purchase for distribution in the United States, Canada and abroad (R. II, 1401). It is arbitrary to assume, as Appellee did (R. II, 1401) that simply because the same item of equipment sold to Bell and non-Bell customers is produced by the same machine, there is such a fair and representative distribution between such two classes of customers of the 100,000 items in 20,000 combinations made by different machines each year, that proper distribution will result between such classes each year of the total variations applicable to the entire production of such items. Appellants know of no mathematical law that will produce such a result, of which the District Court could take judicial notice.

There is no basis for Appellee's showing of Western's profits from Bell sales and for the District Court's findings based thereon for each year of the period under investigation.

D.

Appellee's distribution of the gross variations of entire production of each of the periods 1916 to 1932, inclusive, and 1923 to 1932, inclusive, between the Bell and non-Bell sales of each such period considered as a single unit of time on the basis of their respective standard shop costs of sales assumes but does not prove that each class of sales for each period was a fair and representative cross section of the combined sales of each such period.

Appellee claimed that if the entire production of a period of years were considered as a single unit of business and time, the overall variations which increased and those which decreased the actual cost of such production over the standard cost thereof would offset each other. The overall net effect of such variations thus being negligible,

the significance of such variations on the separate costs and profits of Bell and non-Bell business respectively in the same period and on the issues in respect thereto was negligible (R. I, 569). As proof thereof Appellee showed that the offset of the $58,817,000 increasing-cost variations and $52,493,000 decreasing-cost variations for entire production of the period 1923 to 1930, inclusive, resulted in $6,326,000 overall net variations on such entire production, or, .7% of the actual cost of the entire production of such period (R. I, 569; R. V, 3738). Appellee made a similar showing for the period 1921 to 1930, inclusive, of $59,290,000 increasing-cost variations and $61,123,000 decreasing-cost variations resulting in overall net variations of $1,833,000 or .2% of the actual cost of entire production of such period (R. I, 569, 442; R. V, 3738; R. VI, 3893, 3900, 3903).

Appellants contend: there is no possible relation between the overall net effect of the variations of entire production on Western's earnings from *all of its customers who purchase its entire production considered as a single unit* and on net earnings from its business with any one or more but less than all of its customers, if taken separately or as a unit, *who do not purchase its entire production.* To illustrate: Assume that Western's accounts receivable of its Bell and non-Bell customers in 1929, covering the 100,000 items in 20,000 combinations, were in error in each item ranging from one cent to $25,000 per item, some errors being in the direction of increasing the amount of charge above the amount in fact due and others in the direction of reducing the charge below the amount in fact due. Assume the Bell purchases were 90,000 items. Assume that the total of the errors which increased the charges in 1929 were $16,000,000 and

the total of the errors which decreased the charges were $15,999,999.99.* On that basis the overall net effect of all the variations from the actual charges for all customers, *considered as a unit,* would be one cent, and Western's net profits from such combined business would be affected by only one cent. But obviously the overall net effect of one cent would prove nothing as to the net effect of the errors on the 90,000 items covered by the charges to the Bell System on Western's profits from such business. The same difference in situation would exist, of course, if, instead of considering the overall net effect of the variations on all accounts receivable of a single year, the total of the accounts receivable for a group of years considered as a single unit of time were considered. In such case, the overall net error of one cent would prove nothing as to the net effect of the errors applicable to Bell sales on Western's profits therefrom in such period.

The only condition under which the distribution of the variations applicable to the entire production of a period of years could properly be made between Bell and non-Bell sales of such period on the basis of their respective standard shop costs of sales would be that such Bell and non-Bell sales as separate units of business were each a fair and representative cross section of their combined sales of the same period. *Such a showing, if made, would then permit determination of the actual cost of Bell sales for that period of time considered as one unit of time but would not permit determination of the actual cost of Bell sales in any one year of such period.*

Similarly the showing of the overall net effect of variations for entire production in any one period con-

*The gross variations of entire production for 1929 were $17,720,000 decreasing-cost variations, and $15,247,000 increasing-cost variations, resulting in net variations of $2,473,000 (R. VI, 3892C).

sidered as a single unit of time could have no probative value on the overall net effect of variations for entire production in any other period considered as a single unit of time. Only by a coincidence would the effect be the same. Western's actual experience shows they are not the same (R. II, 1605; R. VI, 3896). Indeed Appellee conceded that the period 1921 to 1930 was selected for its study, because during that period there were not the violent fluctuations in labor and material prices or in conditions of manufacture such as had prevailed prior to 1921 and have prevailed during the depression period subsequent to 1930 (R. I, 444).

Appellants know of no mathematical law that would tend to balance out such variations in any given period of years, of which the District Court could take judicial notice. The District Court made no finding in respect thereto for each of the periods 1923 to 1932, inclusive, and 1916 to 1932, inclusive, respectively. For the reasons stated, Western's actual experience makes such a showing impossible.

There is no basis for Appellee's showing of Western's profits from Bell business and for the District Court's findings based thereon for each of the periods 1923 to 1932, inclusive, and 1916 to 1932, inclusive, respectively.

DISCUSSION AS TO CONTENTION NUMBERED III.

III.

APPELLEE'S SEPARATION OF WESTERN'S MANUFACTURING FACILITIES BETWEEN BELL AND NON-BELL SALES CONSIDERED AS SEPARATE CLASSES OF BUSINESS ON THE BASIS OF THEIR RESPECTIVE "STANDARD SHOP COSTS OF SALES" IS IN VIOLATION OF LAW.

What the District Court Did.

Appellee determined the average investment in Bell and non-Bell operations on the basis of the standard shop costs of sales of each class, claiming that such allocation was on the basis of usage (R. I, 386). The District Court, without discussion, followed such allocation.

A.

Appellee assumes but does not prove that the usage of plant facilities by items and classes of products follows their shop cost of sales.

Appellee's allocation bears no relation to the realities of the situation and therefore is in violation of law (*supra*, 247).

Appellee's claim assumes that the usage of facilities for the manufacture of one class of merchandise is in the same ratio to the total usage of the facilities for the manufacture of both classes of merchandise as the standard shop cost of sales of that class is to the total standard shop cost of all sales. This assumption is arbitrary and contrary to fact. The standard shop costs of sales include

factors of labor, material and overhead in varying proportions (*supra*, 250-1). Neither labor, nor material, nor overhead have any relation to the amount of machinery, tools or space used or occupied in the manufacture of any item. The manufacture of certain articles may require hand labor, whereas other articles are manufactured by the use of expensive equipment. The manufacture of one article may require the same time and facilities as the manufacture of another article but the material may be more expensive in one than in the other.

The effect of using cost of sales as the basis of allocation of facilities will be to penalize one portion of the business for the benefit of the other where fast and slow moving items are combined. Appellants demonstrated this effect by combining plant accounts of companies having high and low ratios of cost of sales to plant and then apportioning the combined plant accounts on the basis of their respective cost of sales (R. II, 1651; R. VI, 4004). In each case the business with a high ratio cost of sales to plant was penalized. In the case of *Chrysler Corporation and Willys Overland*, the former was penalized by an addition of $18,489,000 to its plant account of $126,767,000, for the benefit of the latter; in the case of *Chrysler Corporation and International Cement Corporation*, the former was penalized by an addition of $43,696,000 for the benefit of the latter. Proctor & Gamble Company was penalized by an addition of $58,105,000 to its plant account of $67,700,000 for the benefit of American Radiator & Standard Sanitary Corporation.

Appellee's allocation assumes (1) that the movement of the portion of the 100,000 items in 20,000 combinations, which comprises special commercial products for use in non-telephone fields, moves as fast as the portion which

comprises telephone communication equipment, and (2) that the movement of telephone communication equipment to Bell and non-Bell customers is with the same rapidity. Appellee offered no proof of its assumption, although it had available within its possession all the facilities to make a test thereof. The assumption is not supported by the general conclusion that Western manufactures telephone communication equipment of the same general type for its Bell and non-Bell customers, and until after its manufacture has been completed and the articles are assembled and sold, it is not known whether they will be purchased by Bell or non-Bell customers (R. II, 1592-3). Such general conclusion disregards special commercial products and itself is based on the assumption of identical rapidity of movement of the different items comprising telephone communication equipment which Appellee did not prove. Under such circumstances, and in view of the importance of the matter, conclusions based upon general assumptions should not be accepted as the basis for a finding of confiscation (*Missouri Rate Cases,* 230 U. S. 474, at 501, 507).

B.

Appellee assumes but does not prove that "shop cost of sales" and "cost of production" are synonymous.

Another inherent fatal defect in Appellee's use of standard shop cost of sales as a measure of usage of facilities is that it assumes *that cost of sales and cost of production are synonymous.*

Obviously they are not. Cost of sales of each year is the cost of the merchandise sold during that year, irrespective of the time when they were manufactured. Cost of production is the cost of producing the merchandise

during that year irrespective of the time when they are sold and even though they may never be sold.

To determine cost of sales requires the totaling of the inventory on hand at the beginning of the year, plus the cost of production in the year, less the inventory on hand at the end of the year. (R. II, 1651-2).

Appellee's basis of allocation does not use the production of the current year to determine the usage for that year, but uses instead a part of the production of previous years and a part of the production of the current year. The effect of such a usage is incongruous (R. II, 1652).

To make the cost of sales and cost of production synonymous involves the assumption that the opening and closing inventories would be composed of the same kinds and quantities of product. The record shows such assumption is contrary to Western's actual experience (R. I, 478). Of the 100,000 piece parts making up 20,000 combinations of special commercial products and telephonic appliances, it would be a miracle if any combination or group of combinations of items would make actual use of the manufacturing facilities in the same ratio as do other combinations or groups of combinations. It would be a miracle if all items moved at the same rate. As between Bell and non-Bell sales, the situation is even more difficult, as the items are not of the same kind. Only by a miracle could the opening and closing inventories be as assumed for the purpose of the allocation. Such lack of probability exists whether the operations of a single year or of a period of years are considered separately or as a unit.

There is no basis for Appellee's showing of average investment applicable to Bell business and for the District Court's finding based thereon, for each of the years

1916 to 1932, inclusive, or for the period 1923 to 1932, inclusive, or 1916 or 1932, inclusive, respectively.

DISCUSSION AS TO CONTENTION NUMBERED IV.

IV.

APPELLEE CANNOT AVAIL ITSELF OF EXCUSES OF EXPEDIENCY AND ECONOMY FOR NOT MAKING A PROPER SEPARATION OF WESTERN'S OPERATING EXPENSES AND MANUFACTURING FACILITIES.

Appellee offered no explanation for its failure since December 1, 1930, to make a test over a reasonable period of time on the basis of Western's actual experience—to the facts of which it alone had access—to permit determination at the hearings in 1932 of the relation of its many assumptions to such experience and to permit findings to be based thereon in order that Appellee's presentation might qualify within the specifications laid down by this Court in the Missouri Rate Cases (230 U. S. 474, at 501, 507).*

Appellee claimed as justification for its use of standard shop costs as the basis for its separation that Western did not maintain a separate accounting system for Bell business separated from non-Bell business, and that for Western to install such a system would entail a large expense (R. I, 436). Appellants' position is that: whatever may be the efficacy of such claim under other conditions, Appellee cannot avail itself thereof under the conditions revealed in the record herein.

*Appellee's study covering the overall net effect of the ~~valuations~~ variations discussed in the text (supra, 258) was undertaken after the final hearings began and the issue on separation raised (R. I, 134).

A.

Appellee's use of Western's profits and prices in its presentation on the issues of Rate Base Value, Depreciation Expense, Maintenance Expense and Fair Return for each year of the litigation, and the District Court's findings based thereon, are predicated on strict proof of proper separation for each of such years.

Appellee's presentation and the District Court's findings based thereon, covering Rate Base Value, Depreciation Expense Charges and Maintenance Expense, were predicated on the use of Western's prices of each year of the litigation considered as a separate unit of time and not on the use of the average of Western's prices of a group of years considered as a single unit of time. Such presentation and findings preserve for Appellee the maximum advantages of a proper presentation on Western's profits for each year of the litigation considered as a separate unit of time.

Under such circumstances Appellee cannot fairly claim that its presentation on Western's profits should be accepted as adequate for each such years when such presentation was predicated upon the claimed proper distribution of variations over a *group of years* considered as a single unit of time (*supra*, 258), and then only on the basis of assumptions which Appellee did not prove, and which proof Appellee seeks to have avoided on grounds of expediency and upon a separation of investment which is meaningless.

Appellee's presentation on Fair Return and the District Court's findings based thereon dealt with each year of the litigation as a separate unit of time. Such presen-

tation and findings measured the return to Appellee's investors, including the American Company, as the equity investor, considered as an ordinary investor. The total return on investment for the ordinary investor in the ordinary utility corporation is represented by and must come from the utility's yearly net cash income available for return. But Appellee and the District Court failed to give effect to the consideration that under the mutual Plan of Operation in effect in the Bell system during the period of the litigation, the American Company determines the necessity for and the character of the equipment to meet the requirements of the constituent operating companies and requires them to pay to Western as the manufacturing department of the Bell System, uniform prices therefor (R. IV, 3002; O.R. VI, 1198-9), and the part thereof which proves not to have been needed to produce a reasonable return on the American Company's investment in Western allocable to Bell business inures to the benefit of such operating companies as a part of the return to the American Company on its investment in their securities and as an aid in financing them (*infra*, 464): This repayment of the redundancy in price is made possible because the prices to the Bell System may produce an unreasonable return on the American Company's investment in Western allocable thereto, or because the allocation of revenues, expenses and property between Bell and non-Bell business, may produce an excessive return on the American Company's investment in Western allocable to the non-Bell business, or because the development and research work of Western, whose entire expense has been charged to its own manufactures, produces inventions which find their commercial usefulness in the telephone field not covered by such manufactures, but for th

benefit of which Western is compensated by such other field.

Under such circumstances Appellee can no more justify its inability to make a proper separation for each year of the litigation on the ground that so to do would burden, with an accounting expense, Western and the American Company as the latter's equity investor, than could a Mutual Life Insurance Company justify its failure to determine accurately the cost-factors entering into the yearly premium on grounds of economy and at the same time retain the excess portion of the year's premium established under the Mutual Plan under which it was functioning.

B.

Appellee's justification would unduly burden its subscribers with the consequences of Western's failure to maintain its standard shop cost system responsive to the actual conditions of manufacture.

Appellee assumed the burden to show the reasonableness of Western's profits realized from Bell business as its method of proof that the advantages to Western from its position as the manufacturing department of the Bell System were passed on to the operating companies (*supra*, 237-8). Such proof is necessary to justify any use of Western's prices. To sustain its burden, Appellee chose to use the standard shop cost of sales to determine Western's profits from Bell business, and it is that choice which Appellee must defend. Had Western maintained the competitive relationship of the ordinary manufacturer to Appellee, the ordinary method of proof of the reasonableness of its prices would be available, and in such method standard shop costs would not be an integral part.

Appellee's failure to make a proper separation does not arise from the fact that Western uses a standard shop cost system. It arises from the fact that in the administration of that system Western has permitted the assumed material and labor costs to lag behind the corresponding actual costs for long periods of time, and the assumed operating conditions of manufacture to take on a *significance which does not accord with the actual conditions* of manufacture of the products to which they relate. For such failure Western alone is responsible. The fact, therefore, that a hundred other manufacturers use a standard shop cost system to measure the efficiency of their manufacturing operations (R. I, 383; R. II, 1334) has no probative value on the determination of the particular issue involved herein in respect thereto.

By its presentation Appellee made standard shop costs a factor in price-making as in fact Western itself does in relation to Bell System prices (R. V, 3717; R. I, 379; R. II, 1600). It is inconceivable that 15 cent copper and 8 cent lead or 1929 labor costs would continue as a price-making factor during the depression in respect to competitive manufacturers. Western's own experience with other manufacturers is instructive. In 1924 Western contracted to have the Automatic Electric Company manufacture step-by-step equipment (R. VIII, 4613-25) for sale to the Bell System. In this agreement provision was made that Automatic's prices were to be a designated per cent above cost. Such cost was specified to be determined by standard costs carefully defined and outlined in the contract between the parties plus adjustments for variations. But under such arrangement Western, as the purchaser, had the right to reject the price, in which case the prevailing price continued pending arbitration, and review of such prices was pro-

vided to be made yearly. By so doing Western made adequate provision to cause Automatic's standard costs to become and remain responsive to actual conditions of manufacture. Western made no such provision covering its own manufactures for sale to the Bell System.

Western's failure to maintain the current responsiveness of its standard shop cost system destroys its value as a factor in price-making. To illustrate:

In May, 1932, Western's Comptroller presented Appellee's showing of Western's profits in the instant case. On June 10, 1931, he testified in the Ohio Bell Case (R. I, 590) on the same subject matter and made a similar presentation. In that case he estimated that Bell sales for 1931 would be $256,000,000 and the net profits derived therefrom $10,500,000. In the instant case, he presented a statement showing $219,500,000 actual Bell sales in 1931, and $10,500,000 net earnings derived therefrom (R. IV, 2978; R. II, 1071). A system or showing of distribution of manufacturing and operating costs which can arrive at the same net profits from $219,500,000 sales as from $256,000,000 sales requires more to justify it as the basis for a finding of confiscation than the consideration that Western maintains constant the material costs for a long period of time in order to avoid fluctuations in material prices in its "cost keeping" records (R. I, 383) and that Western considers the labor cost conditions since 1929 so unstable as not to warrant a change in the old standard price rates (*Idem*).

DISCUSSION AS TO CONTENTION NUMBERED V.

V.

APPELLEE'S ALLOCATION OF WESTERN'S DEVELOPMENT AND RESEARCH EXPENSE BETWEEN BELL AND NON-BELL BUSINESS UNDULY BURDENED THE FORMER FOR THE UNJUST ENRICHMENT OF THE LATTER.

Preliminary Statement.

Western's Development and Research Expenses include:

(a) that portion of the expenses of the Engineering Department of the Western prior to 1925 and of the Bell Telephone Laboratories, Inc., thereafter which was allocable and billed to the Western and not billed to the American Company, and which covered the work of developing patents and inventions to be embodied in manufactured products (*supra,* 90);

(b) expenses of the Patent Department covering purchase of patents and royalties and license fees paid for the use of patents;

(c) expenses of the Installation Department for standardization (R. V, 3718).

Western's yearly Development and Research expenses during the period 1916 to 1922, inclusive, ranged from $1,500,000 to $5,500,000 per year; thereafter to 1930, inclusive, they ranged from $6,500,000 in 1923 to $14,000,000 in 1930. The total expenses for the period were $108,300,000 of which $84,971,000, was spent in the years 1923 to 1930, inclusive (R. V, 3654a; Appendix, pp. 73-4).

Appellee allocated these expenses between Bell and non-Bell sales on the basis of the respective standard shop costs of each class of sales (R. I, 331).

A.

The allocation to Bell sales of the portion of Western's Development and Research expense applicable to the four licensed manufacturers of its inventions unduly burdened such Bell sales.

The same four manufacturers—International Western, International Standard Electric, Northern Electric and Automatic—who were licensed to use the results of the American Company's Development and Research work, were also licensed to use the results of Western's Development and Research work (*supra*, 106). Appellee did not allocate any portion of Western's Development and Research expense to them and did not credit as an offset the revenue and value received by Western from them for such licenses (*supra*, 107-113). Its failure so to do unduly burdened Western's manufactures and, to the extent of more than 90% thereof, Bell Sales, and unjustly enriched the Western investment in non-Bell business to the extent of the portion of the substantial revenues received for these four manufacturers to which Western is entitled by virtue of the licenses granted by it to them (*supra*, 106).

In the case of Automatic the entire $4,000,000 received by Products (*supra*, 113), exclusive of the part thereof allocable to the American Company's Development and Research expense, should be included as Bell System revenues of Western. Appellee's claim that the $4,000,000 was given for the surrender of the *option* (*supra*, 115) which has no relation to Bell business is answered by the following facts:

On May 24, 1927, the American Company, Western and the Automatic extended the period during which the exchange of licenses provided for in the 1925 contract already referred to should continue to December 31, 1936 (R. VIII, 4868). By contract dated May 24, 1927, but acknowledged on May 26, 1927, Western extended its merchandise contract with the Sales Agency of Automatic to December 31, 1936 (R. VIII, 4617-25), on a cost plus basis, with provision for reduction in the event of excess volume over the minimum volume therein provided (R. VIII, 4619).

On the same day Automatic's Sales Agency paid Products $500,000 cash and agreed to make nine payments aggregating $3,500,000, spread over the period of the merchandise contract to 1936 (R. VIII, 4610-11).

On the same day, the President of Products, who was also President of Western, advised the Vice-President of the Sales Agency, who executed the purchase contract of May 24, 1927 (R. V, 3738-9):

> "I agree that in the event the results should not conform to expectations between now and December 31, 1930, I, or my successor, will, upon a proper showing of facts, give the matter fair consideration and reduce the amount from $4,000,000 to some intermediate figure not below $3,000,000. After December 31, 1930, however, no reduction in the basic amount will be considered.
>
> In the event that such claim should be made and I am not then president of Electrical Research Products Inc. I obligate myself to see that this phase of the arrangement is carried out in good faith."

In a memorandum prepared by the President of Western, the following appears:

> "The figure of four million dollars was arrived at on the basis that the payment was fully warranted for

the assets involved, and consideration was also given to the volume of business which the Automatic Electric would receive up to the end of 1930, and profits which would result therefrom, as follows:

Year	Minimum Volume Contract of May 24/27 at A. E. 1925 Prices	Estimated Annual Vol. of Business		A. E. Co.
		At A. E. Co. 1925 Prices	At Proposed Prices in Contract of May 24, 1927	Profit on Est. Vol. Under Contract of May 24/27
1927	$3,300,000	$5,300,000	$4,523,000	$694,000
1928	3,300,000	4,700,000	4,313,000	674,000
1929	3,300,000	3,380,000	3,137,000	520,000
1930	2,600,000	2,800,000	2,492,000	325,000

The payment of four million dollars was agreed upon after the Gary interests had estimated the probable results under the contract on the basis of the minimum volume of business per year as set forth above and as in the contract. It was stated, however, to Mr. H. L. Gary that in our judgment the volume would undoubtedly be somewhat greater than the minimum so that the results would probably be more attractive than he had figured on the basis of the minimum figures."

The $4,000,000 was paid prior to 1931, but was not reflected in Appellee's exhibits on Western profits from Bell business. The sales of the Automatic to Western during the period 1916 to 1930 are as follows (R. V, 3739):

(Dollars in thousands.)

1916	...	1921	4,660	1926	6,620
1917	9	1922	4,503	1927	4,442
1918	143	1923	4,170	1928	3,623
1919	417	1924	6,435	1929	4,804
1920	1,967	1925	7,555	1930	5,497

Appellants' version of this transaction is:

(1) The reason for the option was stated to be to give "assurance that the quality and price of the apparatus delivered would be satisfactory to us" (R. I, 463). With the

extension of the 1924 contract to 1936 the same reasons existed subsequent to 1927 as prior thereto for retaining the option for the benefit of the Bell System.

(2) The consideration for the payment was the extension of the patent license contracts of 1925, of the merchandise contract of 1924, and the surrender of the option given to protect the Bell interests—all concerned with Bell business and making use of the services for which the Bell System was paying.

(3) The profits of Automatic, not being in the record, it is impossible to say that its prices were reasonable.

The entire amount should be considered as Western profits from Bell business.

B.

The allocation to Western's Bell sales of the portion of its Development and Research expense applicable to its distributors for resale unduly burdened such Bell sales.

Western's sales only cover sales to Graybar as a distributor (R. VIII, 4878; R. VII, 3939-40). Graybar's license was paid for by the grant to Western of a special participation in its profits (*supra,* 123). The same reasons already stated which require that a portion of such profits be allocated to the License Contract, also require that a portion of such profits should also be credited to the Bell business of Western as an offset against the Development and Research expense applicable to Graybar sales charged thereto.

C.

The allocation to Bell sales of the portion of Western's Development and Research expenses applicable to Products unduly burdened such Bell sales.

On December 31, 1926, Products was organized for the purpose of promoting the inventions of the American Company and of the Western which found application in the non-telephone field. To the extent that the American Company's inventions were used, royalties were paid by Products, as already stated. No compensation was paid to Western to cover the inventions developed prior to 1927 and used thereafter (R. VIII, 4535, 4547, 4565). The largest portion of Western's development expense prior to 1927 was absorbed through Bell sales (Appendix, p. 73); to that extent has the Bell business contributed to the profits of Products, and should share therein.

Products realized rate of return related to its capital and surplus was (R. VI, 3956-7):

1927	63.6%
1928	51.0%
1929	68.1%
1930	18.2%

DISCUSSION AS TO CONTENTION NUMBERED VI.

VI.

WESTERN'S RATE OF RETURN ON TOTAL BELL SALES CANNOT BE RELATED TO ITS SALES TO APPELLEE IN THE SAME YEAR ON THE BASIS OF THEIR RELATIVE PURCHASES.

For the purpose of the following discussion we assume that Appellee's separation of Western's operating expenses and manufacturing facilities between Bell and non-Bell sales is correct, as found by the District Court. The present discussion proves conclusively that Western's return from Bell business considered as a single unit of business cannot be treated as fairly representing Western's return for each year on its sales to Appellee. The impossibility of such determination makes impossible the required proof of the reasonableness of Western's current prices in each year of the litigation considered as a separate unit of time. The impossibility of such determination renders improper their use in the reproduction estimates of each year of the litigation.

Western's sales to Appellee were available from its records, but neither the actual costs of such sales nor the investment applicable thereto were available from Western's records. Appellee and the District Court related Western's rate of return on total Bell sales considered as a unit to such sales on the basis of their relative purchases.

A.

Proof was not and could not be made that Western's sales to Appellee in each year of the litigation was a fair and representative cross-section of its total Bell sales of the same year.

Thus far we have dealt with the proper distribution to the Bell and non-Bell sales of the gross variations between the actual and standard cost of Western's entire production of each year. We now consider the distribution to Appellee of its proportion of the gross variations applicable to Bell business as a unit. The distribution of the Bell System's gross variations to one or more operating companies of the Bell System who purchase *less than the total of Bell purchases* in such year, presents the identical problem, already discussed, inherent in the proper distribution of the gross variations of entire production to Bell and non-Bell sales considered as two single classes of business (*supra*, 247). For the reasons already stated such proper distribution to Appellee's purchases in any year requires that Western's sales to Appellee represent a fair and representative cross-section of its total sales to the Bell System in the same year (*supra*, 257). Without such distribution there can be no relation between Western's rate of return on its total Bell sales and on its sales to Appellee for that year.

The District Court found that Western's sales to Appellee for use in its entire business and for use in its Chicago area "have been a reasonably fair and representative cross-section" of Western's sales to all its Bell customers (R. III, 2519). Though nothing appears in the Opinion to indicate what period of time this finding on comparability was intended to cover, it is clear that it did

not and could not cover the sales of *each year considered as a separate unit of time.* Appellee conceded that it had no information to show and that it would not expect to find that each year's sales to Appellee represented a fair and representative cross-section of Western's sales to all its Bell customers in that year (R. I, 440).

B.

The District Court's finding that Western's sales to Appellee over a period of years was a fair and representative cross-section of Western's sales to all Bell customers in the same period makes possible only the relation of Western's average Rate of Return on Bell sales to its sales to Appellee during such period.

Western's Comptroller, as Appellee's witness, testified that Appellee's purchases over a long term of years were a fair cross-section of the purchases by the Bell System as a unit (R. I, 441). Such conclusion was based on (a) common sense plus an intimate knowledge of Western's manufactures and (b) a study, made for the purpose of the hearings, showing relative purchases by Appellee of 17 important items during the period 1924 to 1930, inclusive (R. VIII, 4431-2A). But analysis of that study reveals (R. VIII, 4432A) that Appellee's purchases of large multiple sections averaged for the 7-year period 10.6% of corresponding total Bell System purchases but such average resulted from Appellee's purchases during the years ranging from 3.5% to 45.3% of corresponding total Bell purchases in the same year. Similar range exists for each of the other items as shown in the analysis reproduced in the Appendix (Appendix pp. 75-81). Analysis also reveals that the per cents of total Bell purchases for each item varies for each year and over a period of years, and

that such variation continues irrespective of the number of years included in the study, the detailed discussion of which appears in the Record (R. VIII, 4434-44; R. II, 2017).

Whether the conclusion is reached, as Appellants contended before the District Court (R. III, 2451-2) and now contend (R. III, 2554), that there is a complete absence of a fair and representative cross-section even over a period of years, or whether the District Court's finding to the contrary is sustained, the most that can be said in favor of such finding is that it has application to a long period of years considered as a single unit of time. For the reasons stated (*infra*, 281) such a finding permits the conclusion only that Western's *average rate of return on Bell sales of that period bears relation to Western's average rate of return during the same period on business with Appellee; but such finding can have no such application to any one year of that period or to any other period.*

DISCUSSION AS TO CONTENTION NUMBERED VII.

VII.

THE DISTRICT COURT'S FINDING THAT IT IS NECESSARY IN DETERMINING THE REASONABLENESS OF WESTERN'S RETURN ON BELL BUSINESS "TO TAKE INTO CONSIDERATION THE RESULTS OF A PERIOD OF YEARS AND NOT MERELY A SINGLE YEAR" PRECLUDES THE DETERMINATION OF THE REASONABLENESS OF WESTERN'S PRICES USED IN THE ESTIMATES UPON WHICH APPELLEE'S CHARGE OF CONFISCATION FOR EACH YEAR OF THE LITIGATION WAS PREDICATED AND SUSTAINED.

The District Court found that on its Bell business Western's average rate of return on "average investment," as defined by it, less the amount of depreciation reserve account was 8%, for the period 1923 to 1932, inclusive, and for the period 1916 to 1932, inclusive, was 7.6%; that with the exception of 1923 its rate of return during each of the years 1924 to 1929, inclusive, was higher than either average return (R. III, 2518):

1923	6.2%
1924	8.8
1925	12.9
1926	10.6
1927	13.6
1928	15.8
1929	11.7

that with the exception of 1921 its rate of return in each of the years 1916 to 1922, inclusive, was less than either average rate of return, and ranged from 1.1% to 6.6% per

year; that in 1930 and 1931 such rate of return was 5.8% and 5.6%, respectively, and for 1932 Western suffered a loss of 3.3% (*supra*, 245).

The District Court found that in determining the reasonableness of Western's rate of return from Bell business and from business with Appellee, the earning results for a period of years must be taken into consideration and not merely a single year, and that so considered Western's rate of return from such business was fair and reasonable during the periods 1916 to 1932, inclusive, and 1923 to 1932, inclusive, subject to the elimination of the effect of the 10.2% increase in Western's price in 1930, and that subject thereto Western's profits in any of its dealings with Appellee have been fair and reasonable (R. III, 2519).

If the question presented were one of abuse of intercorporate relationship, Western's experience with the Bell System and its comparable experience with Appellee over a period of years would have application. But such question is not presented on the record; the question presented is one of confiscation for each of the years 1923 to 1932, inclusive, considered as separate units of time and predicated upon estimates which make use of Western's current prices for certain specific purposes (*supra*, 266).

The only prices to which the average earning experience of a period of years could have application are the composite prices of the period covered by such experience. For the period covering the purchases reflected in the book cost figures of each year, such book cost figures reflect the composite prices to which the average earning experience of such period has application. But Appellee rejected book cost figures as the basis upon which to determine the rate base value and depreciation expense. Thus:

Appellee used Western's *current 1928 prices* to revalue in 1928 its property accounts covering Western's products, to arrive at the rate base value for 1928. Appellee effected such revaluation by converting the prices of gross additions in 1911 and thereafter to the 1928 level (*infra,* 329). From Bell business done on the 1928 prices Western received at least 15.8% return as found by the District Court (*supra,* 245). Such 15.8% return was over twice the 17 year average return of 7.6% and over 98% higher than the average 10 year return of 8% found by the District Court.

Appellee's presentation and the District Court's finding of rate base value for each of the years 1924 to 1929, inclusive, convert on the basis of Western's current prices the entire property account of each such years covering Western's products then in service. But the District Court found that Western had received a rate of return during the years 1924 to 1929, inclusive, which was from 10% to 90% higher than the 8% average return upon which the District Court predicated its finding of the reasonableness thereof. Similarly the District Court's finding of depreciation allowance for each of the years 1924 to 1929, inclusive, give effect to the same prices in the reproduction estimates for the entire *depreciable plant account* covering Western's products in service in each such years.

The District Court's finding of rate base value in 1930, 1931 and 1932 and of depreciation allowance for each of the same three years was intended to give effect to Appellee's reproduction cost estimates using Western's 1929 prices to convert the entire property account of each of the years 1930, 1931 and 1932 covering Western's products then in service. From Western's 1929 prices Western received 11.8% return as found by the District Court, which return is 40% above the average rate of return found by it to be reasonable (R. III, 2518).

Similarly the District Court found, as proper operating expense for each of the years 1924 to 1929, inclusive, the maintenance charges as presented by Appellee which covered purchases from Western ranging from $1,400,000 in 1924 to $3,990,000 in 1929 chargeable thereto. On the basis of the earnings from Bell business done on these prices in each of these years, they are clearly excessive.

There is no more reason to justify the use of Western's current prices which are excessive on the ground that its prices in the past were below some reasonable standard than there is to justify the recovery of past losses by current charges. There is no more reason to justify the use of such prices on the ground that prices in the future will be sufficiently lower to make the average price fair by some standard of reasonableness than there would be to justify excessive charges for service now because conditions in the future may reduce them sufficiently to bring the average within limits of fairness.

DISCUSSION AS TO CONTENTION NUMBERED VIII.

VIII.

THE STANDARDS APPLIED BY THE DISTRICT COURT TO DETERMINE THE REASONABLENESS OF WESTERN'S PRICES AND PROFITS ON BELL BUSINESS DID NOT AND COULD NOT DETERMINE THEIR REASONABLENESS FOR ANY ONE YEAR OR OVER A PERIOD OF YEARS.

The District Court used three standards (R. III, 2508):

(1) "Its rate of profit on sales in its business as distinguished from earnings on investment has been less than

one-half of the rate of profit made on sales by other large, comparable manufacturing industries."

(2) "Western's rate of earnings on its investment in its Bell business and on its investment, less the amount in the depreciation reserve account, has been substantially one-third lower than those of other manufacturing companies whose risks and hazards make them fairly comparable with Western."

(3) Western's reduction in prices during the period of the litigation passed on to its Bell customers all reduction in costs arising from Western's relationship to the Bell System.

A.

The District Court's finding that Western's rate of profit on Bell business has been less than one-half of that made by other manufacturers proves nothing as to the reasonableness of its prices and earnings in such business for any one year or over a period of years.

The District Court's finding was based on Appellee's showing that, taking the period 1925 to 1930, inclusive, as a single unit of time, thirty-eight manufacturers other than Western earned 11.6% on sales and Western earned on its sales to Bell customers 6.4% (R. I, 334); that thirty-two of such companies earned a larger per cent profit on sales than Western and only six earned less (R. IV, 2825).

Such comparison has no probative value on the question of the reasonableness of Western's net profits on Bell business in any year or over a period of years. The District Court found that 5.2% profit of Bell sales produced a 10.6% return in 1926, but in 1929 4.8% profit on Bell sales produced a 15.8% return; that 3.4% profit on Bell sales pro-

duced a 6.2% return in 1923, and the same 3.4% profit on non-Bell sales produced a 13.3% return in 1924 (R. III, 2518). Analysis of the thirty-eight companies involved in Appellee's comparison shows (R. VI, 4001-2; R. II, 1651), among others, that:

Reo Motors with 4.3% net profits to sales had 8.8% net profits to average investment in the six-year period under investigation; National Supply Co. during the same period had 33.2% net profits to sales and only 8.7% net profits to average investment; Atlas Powder with 5% net profits to sales had 8% net profits to average investment; Hupp Motor with 5% net profits to sales had 10.9% net profits to average investment; Columbia Carbon with 26.7% net profits to sales had 9.4% net profits to average investment; and St. Regis Paper with 16.8% net profits to sales had only 5.6% net profits to average investment. On the basis of the profit to sales ratio, Reo cars would be priced too low but National Supply Co.'s products too high. On the basis of the profit to sales and profit to investment ratios, Reo cars would be priced too high but National Supply Co.'s products too low.

The real significance of ratio of net profits to sales in its relation to return is the rapidity of turnover of capital (R. II, 1651; R. VI, 4003). If the sales are no more in dollars than the capital used in the service, the ratio of net profits to sales must be high to provide the depreciation and rate of return percentage on investment. But if the sales are in excess of the capital, the per cent net profits to sales need be a corresponding smaller rate of return percentage. The following comparison explains why Western requires only a small margin of profit on sales to produce a high return on investment (R. VI, 4003):

Ratio of Sales to Average Investment for Year 1927.

	National Supply	Columbia Carbon	St. Regis Paper	Western
Land, buildings, machinery after depreciation	1.43	.83	1.45	7.56
Merchandise	.64	3.08	2.59	4.45
Receivables	.71	8.78	8.54	6.37
Cash	1.76	6.26	11.23	40.15
Current liabilities	2.29	10.01	8.84	6.54
Net average investment after depreciation	.26	.59	.86	2.59
Per cent net profits (before interest deductions) to sales	36.28	23.04	15.52	7.62

B.

The District Court's finding that Western's rate of earnings on its undepreciated and depreciated average investment in its Bell business "has been substantially one-third lower than" that of other manufacturing companies of comparable risks and hazards, proves nothing as to the reasonableness of its prices and earnings in such business for any one year or over a period of years.

The District Court's finding was based on Appellee's showing, taken from several Investment Manuals, that Western's average rate of return from its Bell business related to average investment as defined by it was 8.2% before and 10.9% after depreciation reserve deductions during the period 1925 to 1930, inclusive, considered as a single unit of time, whereas the average rate of return of eighty-eight large manufacturing companies was 11.9% before and 14.5% after depreciation reserve deductions for the same six-year period considering such eighty-eight companies as a unit (R. II, 1339; R. V, 3150).

Analysis of the eighty-eight companies whose composite average results are compared shows:

(1) For Western's rate of return, Appellee used only the portion of Western's operating earnings and average investment applicable to Bell sales, but for twenty companies used the operating and non-operating earnings and assets of the company but not including subsidiaries; for sixty-three companies Appellee used the consolidated subsidiary and parent company total operating and non-operating earnings and assets, and for five companies Appellee used consolidated subsidiary and parent company total earnings part of the time and used parent company total earnings and assets, part of the time (R. II, 1648; R. VI, 3965).

The comparison of operating results with those of operating and non-operating activities combined, is meaningless. Non-operating income includes, among others, dividends (R. VI, 3892a). On the one hand, dividends may not represent the entire operating earnings of the issuer corporation; on the other hand, the stocks to which the dividends have application may be carried on the books of the owner corporation at a nominal value, or at an amount which reflects less than the amount of capital and surplus of the issuer corporation to which such stock has application. Certainly the value of the stocks on the books of the owner corporation would in no event reflect the additional assets of the issuer corporation applicable to funded debt and current liabilities, other than accounts payable (R. II, 1684; R. VI, 3963; R. VIII, 4875), which assets were included as part of the average investment used in Appellee's comparison.

To illustrate: In 1929 Western's non-operating earnings included $5,395,000 dividends (R. VI, 3892a). Of such

amount $5,250,000 came from Products (R. V, 3724). The stock investment in Products was carried in 1929 on the books of Western at $6,250,000 (R. V, 3723). The rate of return on the basis of such book value was 84%. But Products' average capital and surplus in 1929 was $9,600,000 (R. V, 3724) or 53% greater than the amount that Western carried such investment on its books. Western's *total* earnings available for dividends was $6,899,000 or 68% on capital and surplus—17% less than the 84% return on the basis of the dividends related to Western's book investment in Products. But Products' average investment in 1929, on the basis of the District Court's definition thereof, was at least $40,000,000 to which were applicable $8,500,000 in net earnings representing a return of 21% (R. V, 3724). Under such circumstances the non-operating results are bound to present a much more favorable picture than would be presented by operating results only.

The Investment Manuals from which Appellee procured the data for its comparison do not show the detailed non-operating earnings and the character of the assets applicable thereto, of the corporations used by Appellee in its comparison. Thus, we find for the General Electric Company, an item "Other Income" embracing from $10,000,000 to $20,000,000 a year, and representing from thirty to fifty per cent of its entire net earnings. We find also an asset item "Associated Cos. and Miscellaneous Securities" embracing from $68,000,000 to $204,000,000 per year, and representing from fifteen to twenty-three per cent of the average investment of each year of the period used by Appellee in its comparison (Poor's Industrials 1931, pp. 2093-4). But no breakdown of these items appears anywhere. Poor's does show, however, that the General Electric Company has some wholly owned subsidiary compa-

nies, some companies in which it has a controlling stock interest and some companies in which it has a substantial though not a controlling interest (*idem*, p. 2092). Without a breakdown of these items, any comparison between Western's operating results and General Electric Company's combined operating and non-operating results means nothing (R. IV, 2823; R. II, 1648-9; R. VI, 3963-4).

As illustrative of the distorted picture produced by the comparison of Western's operating earnings with the total subsidiary and parent company combined operating and non-operating earnings of the sixty-three companies, Appellant's direct attention to the unreasonably large rate of return of Western's subsidiary companies arising from their exploitation of the developments of Western, the expenses of which were included in Western's operating earnings. Under such circumstances it is unfair to compare the operations of one company, bearing the expenses from which the subsidiary companies received large revenues, with another company whose showing includes the receipts to offset such expenses.

(2) The adjustments to surplus by the eighty-eight companies of the character which Appellee charged to current operating earnings in the case of Western (R. VI, 3988-4001). Some of these are:

(a) Reduction in Book value of capital assets (American Agricultural Company—$10,297,293; Union Carbide $39,794,031).
(b) Patents Written off (Burroughs Adding Machine Company $3,099,212; Dupont $5,354,104).
(c) Adjustment of special tools, dies and patterns—(Continental Motors $2,209,792; Hudson Motors $2,000,000; Willys-Overland $6,125,488).
(d) Appropriation for pension reserve (Dupont $4,880,729, $3,807,968).
(e) Adjustment of patent account (Electric Storage Battery $4,999,999).

(f) Depreciation adjustment for prior years (Goodyear Tire & Rubber Co. $497,125).
(g) Adjustment of physical property value (International Shoe Co. $12,480,944—Credit).
(h) Patents and good will written off (Goodyear Tire & Rubber Co. $10,209,274; National Cash Register Co. $1,683,334; $4,081,268).
(i) Reserve for patents, plant and equipment (Radio Corporation $11,069,234).
(j) Write down of inventories (Radio Corporation $10,359,000).
(k) Write down of inventory commitments, contingencies (Willys-Overland $2,683,724).
(l) Unamortized value of patents (Union Carbide $29,423,509).
(m) Patents, charters, etc. (Westinghouse—$4,621,784).
(n) Obsolescence of plant (Atlas Powder Co.—$1,900,000).
(o) Reserve from prior years earnings released to income (International Harvester Co.—$11,000,000 Credit).

Appellee did not reflect these facts in its comparisons (R. II, 1650; R. IV, 2823, 2825). Appellee gave no consideration to them other than to claim that the overall *net differences* between *credits and debits* to *surplus* are negligible when related to the full six-year period for all the companies as a unit (R. II, 1339, 1372). But such claim has the same relation to the issue involved as does the 1 cent over-all *net difference* in credits and debits in the case set out in connection with the discussion of Standard Shop Cost variations (*supra*, 258).

(3) Seven of the eighty-eight companies carry their inventories at cost for the entire period or for part of the six-year period (R. II, 1650); Western carries its inventory at cost or market whichever is lower, with the additional reduction to maintain its inventory on a rapid turnover

basis (R. I, 400). To the extent of the reduction from cost to market, the rate of return of Western is not comparable to that of the seven companies. To illustrate: The amount of reductions from cost to the fair market value of Western's closing inventory used in its computations of net profits for the year 1930 aggregate $6,808,000 by way of reduction of profits (R. V, 3685; R. I, 399). Without information of the opening inventory it is impossible to determine the effect on the net profits of such reductions. But the fact that such large adjustments are made indicates the danger of using comparisons of profits computed on different bases.

(4) The available data from the sources used by Appellee discloses that in the case of twelve companies the depreciation policy is not shown.

Included among the eighty-eight companies whose "risks and hazards" the District Court found, make them "fairly comparable" to Western, are six companies owning and operating mines; three companies, phosphate, sodium and/or limestone deposits; three companies, timber lands; two companies, rubber plantations; one company, gas wells, oil wells, and pipe lines (R. II, 1651). Their operations involve the question of depletion of investment and return in those particular assets—an entirely different problem with special significance in the combined showing of earnings and current capital return with which Appellee compares only the current operating earning return of Western (R. II, 1651).

Five companies use depreciation rates in conformity with rates approved by the Internal Revenue Department (R. VI, 3985); Western's net earnings on Bell business which Appellee uses in its comparison, give effect to the depreciation expense charges which are at least $10,000,000 in excess

of those approved by the Internal Revenue Department (R. VI, 3960; R. II, 1621-1622). It cannot be fairly assumed that for them the approved expense is the correct expense, but for Western it is $10,000,000 less than the correct expense.

In the case of most of the companies it does not appear whether the depreciation rate is established on a sinking fund basis or on a straight line method (R. VI, 3967-84). The significance of that factor, of course, lies in the disposition of the depreciation reserve in connection with valuation (*infra*, 365). In the absence of information in respect to the depreciation policy on each company involved in the comparison, such comparison based upon return on investment is meaningless.

Assuming, however, that the average showing of the six year period had probative value to support a finding on the reasonableness of Western's profits for the six year period considered as a single unit of time, no such probative value can attach for each year of that period. The record does not contain each year's experience of the eighty-eight companies covered by the average return of the six year period. Western's 8.8% rate of return for 1925 on Bell business, as found by the District Court, is 20% lower than the 10.8% combined Bell and non-Bell return and compares with a loss of 3.7% on non-Bell business only (Appendix, pp. 70-1, 82-3). Yet, Western's return from Bell business for the six-year period 1925-1930 was but a fraction of that from non-Bell business (*supra*, 245). Such average return would have no probative value to support a finding on the reasonableness of Western's current prices used in the estimates to sustain the charge of confiscation in 1925.

C.

The reduction in prices to its Bell customers during the period 1921 to 1929, inclusive, did not and could not prove that Western's return from its Bell business on such prices before or after each such reduction was reasonable.

Western's price policy was claimed to be—that whenever a reasonable profit could be *foreseen* at lower prices than then prevailing, reductions were accordingly made (R. I, 450). Such a policy does not adjust prices for the purpose of returning to the Bell customers any redundancy in price on sales actually made prior to the reduction in excess of the amount required to provide reasonable profit—similar to the practice of mutual life insurance companies (*supra*, 82). Nor does such policy to return to the Bell customers any redundancy in price on sales actually made on the reduced price in case the realized profits exceed the prognostication upon which the reduction is made. The price reductions gave consideration to the administrative reports showing the earning results on the basis of *standard costs* (R. I, 382); from them the probable future results under the estimated volume for the ensuing year were prognosticated. For it should be borne in mind that, according to Appellee, the savings to Western's Bell customers resulting from the reduction in prices have been made possible by standardization of products and increased efficiency of its manufacturing operations (R. I, 566).

The following were the price reductions or price increases and realized return as found by the District Court, during the period under investigation (R. III, 2508, 2518).

	Price Reduction or Increase	Realized Return
1921	— 1.7	10.7
1922	—10.7	6.6
1923	+ 0.2	6.2
1924	— 5.6	8.8
1925	— 1.1	12.9
1926	— 8.7	10.6
1927	— 4.9	13.6
1928	—10.3	15.8
1929	— 8.6	11.7
1930	+10.2	5.8

Certainly no conclusion as to the reasonableness of the realized return in the years 1925 to 1929, inclusive, can be drawn from the price cuts of those or any other years, any more than such conclusion could be drawn from the price reductions of 1922 when the realized return was but a fraction of such later returns.

Nor can any such conclusion be drawn from the finding that by its reduction in prices Western passed on to its Bell customers the reduction in costs resulting from the advantages—elimination of credit risks, selling expenses and production and distribution economies resulting from long-time planning on the basis of advance estimates—which Western had by virtue of its relationship to the Bell System (*Smith* v. *Illinois Bell Tel. Co.*, 282 U.S. 133, at 153; O.R. III, 1117; O.R. VI, 2331; O.R. IV, 1556). As Appellee made no showing of the measure of such reduction in costs, such a finding is necessarily predicated on proof that the reduced price covers the actual cost of production and distribution plus *only a reasonable return on investment* and cannot itself serve as such proof.

DISCUSSION AS TO CONTENTION NUMBERED IX.

IX.

PERCENTAGE FIGURES RELATED TO WESTERN'S DEPRECIATED OR UNDEPRECIATED "AVERAGE INVESTMENT" IN BELL BUSINESS AS FOUND BY THE DISTRICT COURT HAVE NO SIGNIFICANCE WHATSOEVER AS A YARDSTICK BY WHICH TO DETERMINE THE REASONABLENESS OF WESTERN'S EARNINGS FROM BELL BUSINESS FOR ANY ONE YEAR OR OVER A PERIOD OF YEARS.

The per cent of earnings on undepreciated and depreciated average investment from Bell business as found by the District Court for the years 1926 to 1930, inclusive, would be sufficient to pay interest and amortization on money borrowed, and to yield the following per cent return on average capital and surplus allocable to such business in the same years:

	On Average Investment	On Depreciated Average Investment	On Capital and Surplus
1926	8.3	10.6	16.13
1927	10.4	13.6	21.87
1928	11.8	15.8	26.47
1929	9.1	11.7	19.83
1930	4.6	5.8	8.30

Such a striking difference challenges attention to the real significance of the percentage figures found by the District Court.

The District Court measured Western's "investment" in Bell business by what it defined as "average investment": to-wit: "plant and manufacturing facilities, merchandise, receivables and cash, less current accounts

payable, all at cost to Western, except merchandise which is cost or market, whichever is lower'' (R. III, 2507).

The District Court did not deduct (1) working reserves, (2) pension fund reserves, (3) notes payable to trustee of pension fund, (4) current notes payable, and (5) non-operating cash.

Its failure so to do renders the ''average investment'' meaningless as the measure of the amount of invested capital on which Western's investors are entitled to receive a return and renders meaningless the percentage figures derived by relating earnings thereto.

A.

The amount of reserve for Pension Fund should be deducted from gross assets in determining the investment on which to compute a rate of return to Western's investors.

From 1926 to 1927, inclusive, Western retained in its treasury as part of its assets the Pension Fund Reserve accruals ranging from $2,000,000 to $15,300,000 a year during the period 1923 to 1927, inclusive (R. VI, 3909), of which approximately 90% is applicable to Bell business (R. VI, 3910; R. I, 351). The District Court's average investment did not deduct such Reserve for any year of the period 1916 to 1931, inclusive (R. II, 1616). When Western in 1924 determined the amount then in the fund and revised its basis of computation and made additional charges to make up past deficiencies it considered only the principal of the fund then accumulated (R. I, 349). The principal of the pension fund accruals was billed and charged as an operating expense each year on the basis that no income thereon was to be added thereto as a part thereof. On such a basis, therefore, to provide earnings thereon, as the District Court

did, of from 8.8% to 15.8% (Appendix, pp. 84-5) unjustly enriches to that extent Western's stockholders at the expense of its Bell customers (R. II, 1616).

B.

The amount of Notes Payable to Trustees of Pension Fund should be deducted from gross assets in determining the investment on which to compute a rate of return to Western's investors.

To give Western the advantage, under the Federal Income Tax Law, of deducting as an operating expense the current charges to profit for pension fund accruals (R. I, 351), Western arranged in 1928 with the Bankers Trust Company of New York to administer, as Trustee, the pension fund, which theretofore it had carried in its treasury. Under the Trust Arrangement (R. VII, 4153; R. I, 351) Western had the right to advise the Trustee as to the investment of the pension fund accruals deposited with the Trustee. Since the inception of the plan, Western had advised the Trustee to loan those accruals to it on its unsecured notes (R. I, 351), such liability on December 31st of each year being:

1928 $21,064,706 (R. VIII, 4573; R. II, 1616).
1929, $26,128,933 (R. VIII, 4577).
1930, $31,481,085 (R. VIII, 4584).
1931, $35,822,963 (R. VIII, 4587).

The notes were on demand, bearing 5½% interest (R. I, 352), and are part of Western's current liabilities other than accounts payable (R. VIII, 4573, 4577, 4584, 4587).

The principal of the pension fund accruals was built up and charged as an operating expense each year on an annuity basis to provide that such principal, plus the compounded earnings thereon, should equal the amount re-

quired at the date of retirement of the employees the then value of the required pensions (R. I, 352). On such basis, of course, the more the earnings on the principal the smaller the principal deductions as operating expenses. The accruals by Western "contemplate that the fund shall have future earnings at 4 per cent compound interest" (R. I, 352). But certainly if the principal is to be used in Western's business to earn in 1928, 15.8% and in 1929, 11.7%, such earning rate should be given effect in the computations. The District Court's treatment of this item unjustly enriches Western's stockholder at the expense of its Bell customers.

C.

The amount of Working Reserves should be deducted from gross assets in determining the investment on which to compute a rate of return to Western's investors.

Appellee failed to deduct for the years 1926 to 1930, inclusive, the working reserves which represent accrued interest, accrued taxes and accrued accounts payable. They range from $6,900,000 to $11,100,000, of which over 90% is applicable to Bell business (R. VI, 3909, 3910).

For the years prior to 1926, Appellee's working papers show that it included these items as "Accounts Payable" and deducted them in arriving at "Average Investment" (R. II, 1617). No explanation was given for the change in the method of handling the items in the exhibits for the period beginning with 1926 (*Idem.*). In the annual reports to stockholders for each year from 1910 to date, Western has included such reserves as "current liabilities" and not as "capital liabilities."* The accruals for each of these

*R. VIII, 4515, 4516, 4517, 4521, 4522, 4524, 4525, 4526, 4528, 4532, 4537, 4552, 4555, 4559, 4564, 4565, 4568, 4573, 4577, 4584, 4587.

items of expense are built up on the basis that they will not receive earnings pending use; otherwise the current accruals should be reduced to give effect to such earnings. It is a repudiation of the basis upon which the charges as operating expenses were made in respect to these items to permit Western's investors to earn from 10% to 15% a year on such reserves for the years 1926 to 1929, inclusive, pending their use to pay interest, taxes, etc.

D.

The amount of current notes payable should be deducted from gross assets in determining the investment on which to compute a rate of return to Western's investors.

Beginning with 1922 the American Company supplied Western with a part of its temporary working capital and left with Western its own funds not currently required for its own operations. To evidence such loans Western gave its notes due on demand or on before one year from date (R. I, 457). In the years 1923, 1929 and 1930 the yearly average of such temporary funds ranged from $17,000,000 to $22,000,000 per year; in the other years from $600,000 to $6,000,000 per year (R. V, 3690-1). The American Company claimed that this financing "furnishes the money on the cheapest basis that the Western could get it" (R. I, 869), and that "the licensees get the benefit of this financing by American Telephone and Telegraph Company of Western Electric because Western Electric gets cheap money" (R. I, 870).

In addition, Western borrowed from banks, Trustee of Pension Fund and others on demand and on short time notes, amounts ranging from $6,000,000 to $26,000,000 per year, in the period 1922 to 1930, inclusive. Over 90% of the

principal of these loans was allocated to Bell business (R. VI, 3909). Appellee did not deduct this item (R. I, 457-8; R. II, 1330).

There are three reasons why this item should be deducted:

(1) By not deducting the principal of the American Company's loans in any year in which Western's per cent of return on "average investment" less the amount of the depreciation reserve account exceeds the interest rate paid the American Company, Appellee repudiates the American Company's representation in respect to the beneficial effect of such loans to the Associated Companies.

(2) Appellee's treatment of "current liabilities" in arriving at "average investment" is contrary to the treatment made thereof by Appellee's witness, who testified on what would constitute fair earnings from Western's Bell business. Mr. Bloom, President of Western, testified:

> "Not less than 10 per cent on the book cost would have been fair earnings for the Western Electric Company in its business with the Bell Associated Companies during the period 1916 to 1931. By 'book cost' I mean the cost of the assets devoted to the Bell business less the current liabilities" (R. I, 414).

The witness did not define "current liabilities." But, beginning with 1926, Western's annual reports, bear the signature of Mr. Bloom, who, as President of Western, presented the report to its stockholders on its behalf (R. I, 404). In such reports the "capital liabilities" only include the capital stock and the funded debt of Western; the "current liabilities" include all the notes and accounts payable (other than funded debt) and working reserves (accrued interest, taxes, payroll and items not yet due) (R. VIII, 4565, 4568, 4573, 4577, 4584).

(3) Appellee's treatment of "current liabilities" in arriving at "average investment" is contrary to the treatment made thereof by Appellee at the 1929 hearings in its presentation of the rate of return of manufacturing companies to sustain its claim for a fair return. At the 1929 hearings, Appellee, through an executive of the American Company whom it qualified as an expert on finance (O.R. I, 869) made a showing of the rate of return in 1923 of selected manufacturers. Such showing was made by relating their net earnings available for interest on *funded debt and dividends* to a rate *base* from which *current* liabilities had been deducted. That expert testified:

> "I have information available for the year 1923 showing the per cent earned on investment of companies other than public utilities, such as motor companies and other manufacturing companies. For the purpose of determining what the Rate of Return on investment was on large well-known manufacturing companies in 1923, I made a study, taking those manufacturing companies whose earnings were at least $1,000,000 per year. I did that in order to obtain the large representative companies. I took as the net investment the total assets minus all intangibles and the current liabilities. * * * In the main the source of this information was Moody's Manual of Industrial Companies" (O.R. II, 871).
>
> "The average investment for the year I arrived at by taking the simple average of the net investment at the beginning and at the end of the year. For net earnings I took the amount remaining after all charges, including depreciation, and Federal income tax, so as to arrive as closely as possible at the balance available for interest and dividend" (O.R. II, 871).

This expert's presentation was on the basis of net earnings available for interest on *funded* debt and dividends (O.R. II, 871) not for interest on funded and current interest-bearing debt and dividends.

And Moody's Manual of Industrial Corporations shows "current liabilities" as including current interest-bearing obligations of the classes not deducted by Appellee's showing at the 1932 hearings and by the District Court's findings based thereon (R. II, 1165).

E.

The amount of cash from non-operating activities should not be included as part of the investment on which to compute a rate of return to Western's investors.

Appellee failed to deduct the amounts shown in the record (R. VI, 3910-1) representing cash in excess of the amount which Western, in the regular course of its business, calculated was the normal cash balances required for its manufacturing operations (R. II, 1615; R. VII, 4097 *et seq.*). The amounts range from $900,000 to $20,500,000.

The American Company claims that it loses money each year to provide and hold funds available so that the Associated Companies can have provided, in advance of construction, the expenditures thereof. Western claims that condition as one of the advantages of the Bell System relationship and the financing of Western is predicated on, and gives effect to, contemplated receipts from the Bell System with meticulous care to the very date of expected payment (R. VII, 4097 *et seq.*).

During the year 1925 Western received large sums of money from its sale of International Western properties (R. I, 468, 471), from its special dividend on September 30, 1925, of $9,700,000 from International Western (R. VI, 3927; R. II, 1628), and from its earnings in its own business. In 1925 such surplus funds were represented by large amounts of cash in excess of $20,000,000 (R. V, 3696;

R. VII, 4103; R. I, 468) and in the following year were represented by United States Government securities aggregating $30,000,000 (R. VIII, 4871; R. I, 472). These were transferred to Products on December 31, 1926, as "non-Bell assets" (R. I, 472). But Appellee considered such cash funds in 1925 as Western operating assets to be allocated between Bell and non-Bell customers on the basis that $18,340,000 of such excess funds were considered as part of the Bell average investment on which the District Court found Western earned over 12% from Bell business.

DISCUSSION AS TO CONTENTION NUMBERED X.

X.

WESTERN'S NET EARNINGS FROM BELL BUSINESS, AS DETERMINED BY THE DISTRICT COURT, FROM THE PRICES USED IN THE ESTIMATES UPON WHICH THE CHARGE OF CONFISCATION FOR EACH YEAR OF THE LITIGATION WAS PREDICATED AND SUSTAINED, ARE EXCESSIVE.

Western's net earnings available for return from Bell business, as found by the District Court, would be sufficient to pay interest and amortization on money borrowed and to yield the following per cent return on average capital and surplus allocable to such business in the years 1926 to 1930, inclusive (Appendix, p. 72):

1926	16.13%
1927	21.87
1928	26.47
1929	19.83
1930	8.30

But such was not the total return which the American Company would receive on its equity investment in West-

ern. During the same year the American Company as the equity investor in Western's non-Bell operating investment would receive the following yield on capital and surplus (Appendix, p. 72):

1926	41.05%
1927	32.54
1928	50.36
1929	65.75
1930	15.03

To the extent that the Bell business was unduly burdened and the non-Bell business unjustly enriched by the failure of Appellee to make the proper separation of operating expenses on the basis of standard shop cost of sales (*supra,* 247) or of development and research expense (*supra,* 271), the American Company's return on Bell business is reflected in the fantastic earnings of the non-Bell business produced by Appellee's separation.

For the year 1925 the rate of return from Bell business as found by the District Court was higher than for 1926 (*supra,* 245), and such return translated into a return on capital and surplus would exceed the 16.13% shown for 1926. Such earnings would therefore be excessive for 1925.

For the years prior to 1926 it is impossible to translate the rate of return on the rate base found by the District Court for Bell and non-Bell business into a rate of return on capital and surplus applicable thereto for the reason that prior to 1926 Western's retail supply business was conducted as a department of its manufacturing business and the comparable data for that department is not available to permit the same allocation as for the years subsequent to 1925 when that department was transferred to Graybar Electric (R. VI, 3939). But the rate of return found by the District Court of 8.8% for Bell business and

13.3% for non-Bell business in 1924 (Appendix, pp. 84, 71), indicates that if translated into a return on capital and surplus they would yield excessive returns—the capital and surplus being substantially lower than the rate base figure used by the District Court in arriving at its percentage figures of earnings (Appendix, p. 72).

For the reasons already stated (*supra*, 296), the fact that the capital and surplus are substantially lower than the District Court's rate base used in its computations does not in any wise impair the validity of using them in the yardstick to arrive at reasonable earnings as known in the business world.

For the three years 1930 to 1932, inclusive, the District Court maintained the 1929 prices in the determination of rate base value, depreciation expense charges and maintenance charges by eliminating from its computations the 10% increase made in 1930 (R. III, 2519). The 1929 prices are clearly excessive (*supra*, 305). On the basis of the reproduction of Appellee's property the purchases during each of the years of the assumed construction period would exceed Appellee's purchases in 1929 to which Western's rate of return for that year had application. Western's operating results arising from the prices used in the revaluing of Appellee's property in 1930, 1931 and 1932 clearly would be as good if not better than those which Western actually had in 1929. To use prices to revalue property in the depression years, when such prices produce for the manufacturer 19.83% on capital and surplus, is fantastic.

We have in this way accounted for every year of the litigation but 1923, when on the District Court's finding the rate of return from Bell business was 6.2% and non-

Bell business 18.9%. For the reason stated (*supra,* 304), such return is excessive.

As Western's current prices in each year of the litigation were entered in the estimates upon which the charge of confiscation for each year was predicated and found, it follows that Western's prices so used were excessive.

DISCUSSION AS TO CONTENTION NUMBERED XI.

XI.

WESTERN'S EARNINGS FROM BELL BUSINESS AS FOUND BY THE DISTRICT COURT, ARE UNDERSTATED IN EACH OF THE YEARS 1924 TO 1929, INCLUSIVE.

The District Court's findings understate Western's earnings from Bell business by improperly including as "operating expenses" four substantial items.

Their effect is indicated by the following comparison of the return on capital and surplus which resulted from the District Court's findings, and which would have resulted had the District Court made the four adjustments thereto requested by Appellants in the years 1926 to 1929, inclusive (R. VI, 3959, 3922-5):

	District Court		Adjusted	
	Bell	Non-Bell	Bell	Non-Bell
1926.....	16.13	41.05	21.53	33.48
1927.....	21.87	32.54	25.90	29.47
1928.....	26.47	50.36	29.00	43.78
1929.....	19.83	65.75	21.48	56.93
1930.....	8.30	15.03	7.17	11.50

A.

Appellee improperly deducted over $7,000,000 from current income of the years 1924 to 1927, inclusive, to make up the excess of original cost of plant in service over their prognosticated reproduction value during the ensuing ten to fifteen years.

Appellee's showing on Western's earnings on Bell business deducted as operating expenses the following amounts to cover what it has designated as "extraordinary depreciation" (R. VI, 3917):

1924	$1,563,000
1925	1,966,000
1926	1,914,000
1927	1,666,000
	$7,109,000

These amounts represent current deductions from current income to make up the excess of original cost over the reproduction cost new estimate of its property in service. Such estimates were predicated upon current forecasts of probable future construction costs. The period of the forecasts for the 1924 and 1925 appropriations was ten years (R. V, 3746W, 3747, 3746S, 3746E) and the period of the forecasts for the 1926 and 1927 appropriations was fifteen years (R. V, 3743-6).

Appellee's showing of Western's rate of return based upon Western's records did not reflect any deduction from the book investment to cover the amount of the shrinkage in value in respect to which the appropriations from income were made. Book cost was used in every year, including 1931 (R. II, 1621; R. I, 363).

Late in the final hearings herein after the deductions from income were questioned by Appellants (R. II, 1621; R. VI, 3917) Appellee produced Western's outside auditors who testified that if such deductions were made as operating expenses, corresponding adjustment should be made to Western's investment account in determining its Rate of Return (R. II, 1384, 1402). Appellee's revised exhibits gave effect to such testimony (R. V, 3133-4). The District Court without discussion adopted Appellee's revised showing (R. III, 2517).

The following discussion proves conclusively that the deductions as operating expenses and from investment are contrary to law.

(1) Western uses the straight-line method of computing annual depreciation expense charges against earnings in such amounts as will distribute evenly through the service life of the property the ENTIRE ORIGINAL COST of property in service less salvage (R. I, 356). By such method the integrity of the investment on the basis of original cost is preserved in full (R. VI, 3755-61). Any additional recovery from earnings pending the retirement of the property on the ground that the original investment will not be covered constitutes a repudiation of the basis on which the depreciation rate was computed, and results in the unjust enrichment of Western to the extent of the excess charge.

(2) Nor can such deductions be justified on the claim of a special reserve to offset a cheaper replacement of existing plant (R. VI, 3782). Such claim is inconsistent with the basis upon which the straight-line method has been justified by Appellee and the Bell System: they deny that the depreciation expense charges are to provide replacements (R. VI, 3755-61, 3781-2, *infra*, 436).

(3) The deductions from average investment in determining rate of return do not undo the effect of the improper deductions as operating expenses, they merely spread them over a longer period of time (Appendix, pp. 71, 84); their effect is to distort the picture upon which the charge of confiscation is predicated in each year of the period involved and to distort the return on investment which Western's investors in fact received each year. In addition, the District Court's treatment prejudices Western's showing by comparison with other manufacturers on the basis of the ratio of net earnings to sales (*supra*, 285).

B.

Appellee improperly deducted $7,275,000 from current income for the years 1925 to 1927, inclusive, to make up underaccruals of the years prior to 1923 for its pension fund liability.

At least since 1906 Western made pension fund accruals to a reserve; at the end of 1923 Western established such accruals on an actuarial basis (R. I, 348). According to its actuarial study it determined that as of December 31, 1923, the minimum required fund should have been $10,962,000 instead of $2,000,000 in principal. To make up the deficit, Western appropriated from the earnings of the period 1925 to 1927 the sum of $7,275,000 in excess of the accruals which it appropriated to provide for the pension

*The significance of the forecasts of 1924 to 1927 and of the action taken thereon in relation to the failure by Appellee and by the District Court to value Appellee's property in the light of future conditions are discussed (infra, 349).

fund liability required for each such year, in accordance with its actuarial computations (R. VI, 3917):

1925	$1,663,000
1926	2,905,000
1927	2,707,000
	$7,275,000

Appellee's original showing of Western's earnings at the final hearings was predicated upon such overaccruals as proper deductions in the years when made (R. IV, 2916-19). After Appellants questioned Appellee's failure to redistribute the accruals over the years in which the deficiency was supposed to exist (R. II, 1620; R. VI, 3909-10), Appellee presented another actuarial study (R. IV, 2977) based on the testimony of an insurance company actuary which showed an overaccrual in the three years of $1,066,000, $2,388,000, and $2,192,000, respectively, aggregating for the three years $5,516,000. This same study showed substantially larger underaccruals for the period prior to 1925 than that shown in Western's previous study (R. IV, 2977), and substantial underaccruals for the period subsequent to 1927 and a deficit in the pension fund reserve as of the end of 1931 (R. IV, 2977). Appellee made no redistribution of the overaccruals shown by either study, in its revised showing of Western's earnings from Bell business* (R. IV, 2978); the District Court followed Appellee's showing.

The charge to current operating expense of the overaccruals in the years when made is clearly wrong. (1) Proper distribution of operating expense in each year of the

*The adjustment for pension fund accruals of 1924 found by the District Court (R. III, 2518) was made on the basis of Appellee's concession that it had included $120,000 accruals applicable to non-Bell business in Bell System operating expenses.

litigation is required to permit determination of the issue of the reasonableness of Western's prices in the uses made of them by Appellee (*supra*, 236). (2) The accounting practice of making up deficiencies in past pension fund accruals through appropriations from current earnings of the future period is not the practice followed by other manufacturers with whom the District Court compared Western in respect to their comparative earning record (R. II, 1621). In the case of the Dupont Company, the surplus was used to make up such deficiency to the extent of $8,600,000 (R. II, 1620; R. VI, 3998). (3) The computations upon which the claimed deficiency was established to require overaccruals were unfair and defective. The deficiency was computed in each study on the basis that the pension fund accruals would have a 4% earning rate in spite of the fact that Western employed such funds in the business which produce the earning rate far in excess thereof (*supra*, 237). The earnings on the pension fund, at the rate of earnings earned during the years of the studies would have made up the claimed deficit in whole or in large part. And the balance of such deficit, if any, could have been absorbed by the excess pension fund reserve in the light of the depression with its change in labor wage scale and reduction in personnel (R. I, 383).

C.

Appellee improperly deducted $1,831,000 from current income of 1928 to cover depreciation on machinery for the years 1924 to 1927, inclusive, in excess of the amount charged during such years.

From 1924 to 1927, Western's depreciation reserve against machinery ranged from 43% to 45%. This depreciation reserve had been built up through a depreciation rate

of 7½%. In 1928 Western raised the current depreciation rate on machinery from 7½% to 10%, and also appropriated an additional $2,000,000 to make the 10% rate retroactive for the period 1924 to 1927, inclusive. The entire $2,000,000, however, was charged against the 1928 earnings (R. I, 363). Appellee's showing on Western's rate of return from Bell business and the District Court's findings based thereon gave effect to $1,831,000 as the portion applicable to such sales (R. VI, 3917). The 7½% rate was in conformity with the general practice of manufacturing companies, as shown in the case of the eighty-eight companies which the District Court used as a basis of comparison in respect to the reasonableness of Western's earnings (R. II, 1677; R. VI, 3985). The $1,831,000 deduction should not be allowed as an operating expense.

D.

Appellee improperly deducted against current income of the years 1924 to 1929, inclusive, $4,100,000 for depreciation on tools, furniture and fixtures in excess of the yearly amounts allowed by the Internal Revenue Department.

The practice of Western has been to so charge depreciation on small tools, furniture and fixtures as to maintain the reserve at 95 per cent to 100 per cent for each account (R. V, 3674B). Appellants spread the charge over a four and six-year life respectively, instead of charging off the entire purchases in the year in which made, as is the practice of Western. Appellants' adjustment conforms to the amounts of depreciation allowed Western by the Internal Revenue Department (R. II, 1622). Five of the eighty-eight companies with whom Appellants compared Western's earnings are reported as determining their depreciation charges "in conformity with the rulings of the Internal

Revenue Department" (R. II, 1649; R. VI, 3895)). Appellants' adjustment had the effect of increasing the net income in ten of the years in the period 1916 to 1930, inclusive, by an aggregate amount of $10,015,000 (R. VI, 3917), and of decreasing the same in five years by $1,295,000 (R. VI, 3917). In 1929 the adjustment increased earnings by $4,334,000; the increases of the years 1924 and 1928 offset the decreases of the years 1924 to 1927, inclusive.

DISCUSSION AS TO CONTENTION NUMBERED XII.

XII.

THE DISTRICT COURT'S FINDINGS RENDER IMPOSSIBLE THE DETERMINATION OF THE EXTENT TO WHICH WESTERN'S EXCESSIVE RETURNS ENTER INTO THE ESTIMATES UPON WHICH THE CHARGE OF CONFISCATION FOR EACH YEAR OF THE LITIGATION WAS SUSTAINED.

A.

The per cent of net earnings to Bell sales as found by the District Court does not and cannot measure the extent to which the prices used in the District Court's findings were excessive.

Before the percentage of net earnings to Bell sales, as found by the District Court, could have probative value to determine the maximum extent to which Western's net earnings could be considered as entering into the estimates of Fair Rate Base Value, Depreciation Expense and Maintenance Expense, it would be necessary to determine:

(1) the extent to which the net earnings from Bell business as found by the District Court have been unduly burdened by

(a) Appellee's separation, on the basis of standard shop cost of sales, of operating expenses between Bell and non-Bell business (*supra*, 247);

(b) Appellee's separation of Western's Development and Research expenses between Bell and non-Bell business (*supra*, 271);

(c) Appellee's improper loading of operating expenses by four substantial deductions from gross income (*supra*, 307).

Items (a) and (b) cannot be determined from the record.

(2) The amount of material entering the gross additions, and retirements of each year beginning with 1912, and entering into the Reproduction cost estimates of each of the years of the litigation as the basis for Fair Value. Such determination is impossible because no division of material and labor was made of the plant in service in 1911 and of the retirements thereafter to June 30, 1923, as parts of the reproduction cost estimate as of that date and for each year thereafter (*infra*, 333).

B.

The District Court's findings do not permit determination of the extent to which the depreciation expense allowance and rate base value as found by it were inflated by the excess profits of Western included in the prices used in arriving at such findings.

Without a determination of the net earnings from the Bell business of the material covered by each reproduction cost estimate it is impossible to determine the extent to which the excessive earnings enter into such estimates on which the District Court's findings of Depreciation Expense Charges and Rate Base Value were based (*infra*, 316, 378).

RATE BASE VALUE.

Preliminary Statement.

1. The Chicago intrastate rate base value as found by the District Court was higher in every year of the period 1923 to 1931, inclusive, than the corresponding average outstanding capitalization (stock, surplus and funded* debt). Such excess for the period 1923 to 1929, inclusive, ranged from $55,000,000 to $68,000,000 per year and represented from 52% to 83% of corresponding outstanding capitalization. Such excess for the year 1930 was $54,700,000, representing 41% of corresponding outstanding capitalization, and was $44,100,000 in the year 1931, representing 33% of corresponding outstanding capitalization. It should be borne in mind in this connection that in every year of the litigation the average outstanding capitalization corresponds to the same year's average book value of fixed plant, construction work in progress, materials and supplies, and working cash capital, as claimed by Appellee and found by the District Court, less the amount of the recorded depreciation reserve account (Appendix, pp. 87-8; R. VII, 4223-4).

2. The Chicago intrastate rate base value as found by the District Court exceeded Appellee's entire company average outstanding capitalization (stock, surplus and funded debt) in each of the years 1923 to 1927, inclusive. In 1928 and 1929 the Chicago intrastate base value represented

*Funded debt as used herein includes bonded debt, notes to pension fund trustee, advances from System Corporations and Bell Realty Trust, stock installments on which interest was paid and other small miscellaneous items (R. V, 3083-90; R. VIII, 4457-61; R. VI, 4009-19).

97% and 92%, respectively, of Appellee's entire company capitalization, and in 1930 and 1931 represented 84% and 77% of such corresponding capitalization. But the capitalization applicable to Chicago Intrastate business ranged from 58% to 63% of Appellee's entire company capitalization during said period (Appendix, p. 87).

What the District Court Did.

The District Court found the fair rate base value for the entire Chicago Division and then allocated a part thereof to Chicago intrastate business. The allocation is not in issue.

Period 1923-1929, Inclusive.

The District Court found the fair rate base value for each of the years 1923 to 1929, inclusive, on the basis that:

(1) Appellee's estimates of reproduction cost new for each year are "substantially correct" (R. III, 2504).

(2) "the fair rate of depreciation to be applied to the reproduction cost new in determining the valuations for rate making purposes" is 16% for the years 1923 to 1928, inclusive, and 15% for the succeeding years (R. III, 2515);

(3) "the amount to be added on account of going value to the reproduction cost new of the physical property of the plaintiff in determining valuations for rate making purposes is eight per cent thereof" (R. III, 2516);

(4) the amounts of working cash capital, materials and supplies, and average construction work in progress as presented by Appellee are correct and in respect to which there is no issue (R. III, 2505);

(5) the fair rate base value for the entire Chicago area ranged from $130,000,000 to $200,000,000 per year—such

amounts represented the sum total of the following: the average of reproduction cost new estimate of the property as to the beginning and end of each year, going value, working cash capital, materials and supplies and construction work in progress, less the depreciation percentages determined for each of the years; minus or plus amounts ranging from $434,000 to $5,278,000 per year (Appendix, pp. 86, 93). No explanation for these minus or plus adjustments appears in the Opinion.

Period 1930-1931, Inclusive.

The fair rate base value for the entire Chicago area, as found by the District Court, was $205,000,000 for 1930 and $197,500,000 for 1931, respectively. Such amounts were determined on the same basis as those for the previous years subject to two adjustments: (1) a 10% cut from Appellee's reproduction cost new estimate of 1930 and 1931, to offset, as the District Court claimed, the 10.2% increase in prices by Western on November 1, 1930, which continued thereafter, and which prices were used by Appellee in such estimates (R. III, 2508); and (2) an unexplained deduction of $319,800 for 1930 and an addition of $43,500 for 1931 (Appendix, pp. 86, 93).

1932.

The District Court found the fair rate base value to be $185,000,000, although Appellee made no presentation covering that year, and although the record closed on July 1, 1932 (R. III, 2515). The District Court stated that it intended the 1932 valuation to reflect Western's 1929 prices.

To these findings, Appellants assigned error (R. III, 2563-7).

Appellants' Position.

Appellants' position is:

(1) On the basis of Appellee's presentation and the record no evidence appears upon which a valid finding can be made of the undepreciated value of its property in service of any greater value new than appears on Appellee's books for each of the years of the litigation (*United Fuel Gas Co., et al.* v. *Railroad Commission of Kentucky*, 278 U. S. 300, at 318; R. III, 2458-9).

(2) A rate base giving effect to such book cost of property is more than the fair value of property in each such year on which Appellee is entitled to a return.

(3) The rate base value for each of the years of the litigation should embrace the total of the following:

(a) the book cost of fixed plant less the amount of the depreciation reserve account which gives effect to the depreciation allowances as determined for operating expense purposes;

(b) construction work in progress, materials and supplies, and working cash capital as found by the District Court;

(c) the amount of Going Value allowed by the Commission's Order of August 16, 1923.

On the basis that the depreciation reserve account used in the computations gives effect to the 1923 Order on depreciation expense charges, Appellants claim and have used herein as the proper intrastate rate base value for each year of the litigation the following (Appendix, p. 88, *infra*, 498).

1923	$ 70,303,280
1924	81,284,072
1925	92,377,047
1926	103,940,975
1927	117,958,532
1928	131,125,170
1929	142,367,088
1930	154,030,558
1931	158,813,267

In support of their position, Appellants offer the following:

SUMMARY STATEMENT OF APPELLANTS' CONTENTIONS.

I. The District Court's findings of fair rate base value produce fantastic results.

II. Appellee's method could not possibly produce, for any year of the litigation, a reproduction cost new estimate of its telephone plant, exclusive of overheads.

A. Appellee's use of the book cost of gross additions and retirements as the base to which it applied its index numbers, preserves in its result the higher costs (1) of manufacturing materials and (2) of construction labor, which prevailed prior to various improvements therein, and (3) of piecemeal construction.

B. Appellee's method of computing its material index assumes but does not prove that Appellee's gross additions each year beginning with 1911 consisted of the identical items and quantities as the selected items and quantities of the 1923 plant accounts which Appellee used in its computations.

C. Appellee's method of computing its labor index assumes but does not prove that Appellee's gross additions

were constructed each year from 1911 to 1923 by a gang makeup corresponding to the theoretical gang makeup based on the average labor conditions of the entire period 1911 to 1923, inclusive, considered as a single unit of time.

D. On the record it is impossible to determine the extent of distortion produced by Appellee's use of book cost of gross additions and retirements and index numbers to arrive at its reproduction cost new estimate.

III. The reproduction cost new estimates of telephone plant can not measure the fair value new of such property.

A. The District Court's findings of fair value new are inconsistent with its findings on Western's Profits and Prices.

B. The basis upon which Appellee made its presentation of Western's Profits and Prices precludes the possibility of using Western's current prices in the reproduction cost new estimates as fair value.

IV. Appellee's reproduction cost new estimates of all physical property for each of the years 1923 to 1929, inclusive, and those for the years 1930 and 1931 as adjusted, did not make an honest and intelligent forecast as to the probable prices and wage levels during a reasonable period in the immediate future.

A. Western's current prices used in each reproduction cost new estimate from 1923 to 1929, inclusive, and for 1930 and 1931, inclusive, as adjusted by the District Court, cannot represent fair value determined in compliance with the *McCardle* Case.

B. The District Court's acceptance as fair value of the average of the beginning and end of the year reproduction cost new estimates of buildings is contrary to its findings on Western's Profits and Prices.

C. Foreseeable conditions indicating cheapening of plant and reduction in prices were disregarded by the District Court.

V. The overhead charges included in Appellee's reproduction cost new estimates for each year were improperly determined to form the basis for a valid finding of fair value new.

A. Appellee is not entitled to capitalize overheads which it charges as operating expense, under the special conditions of this record.

B. Appellee's method of computing the theoretical overheads unjustly enriches its investors on the additional capital invested during the period of the litigation.

C. Appellee's inclusion of theoretical overheads in excess of book overheads on the basis that the property will be rebuilt is a repudiation of the basis on which its current price estimates of the telephone plant were predicated.

VI. The rate base value which is based on Appellee's book cost of property is more than the fair value thereof on which Appellee is entitled to a return.

VII. The District Court's method of computing Going Value as part of the rate base was improper and unduly burdened the telephone service charges during the period of the litigation.

A. The District Court's method of computing Going Value unjustly enriches Appellee's investors on the additional capital invested during the period of the litigation.

B. The use by the District Court of Appellee's reproduction cost new estimate of each year as the base to which it applied the 8% figure to determine Going Value, renders the amount thereof arbitrary and grossly excessive.

VIII. The District Court's findings on fair rate base value should have deducted from the reproduction cost new of the depreciable property of each year a percentage thereof equal to the percentage which the amount of Appellee's depreciation reserve was of the undepreciated book cost of such property as of the same date.

A. That portion of the depreciation reserve which represents the advance contributions made prior to and during the period of the litigation, inclusive, for anticipated depreciation on contemplated future additions to central office equipment and buildings, should be deducted from the rate base to prevent the unjust enrichment of Appellee.

B. The use by Appellee of the straight line method of determining depreciation expense charges on property in service involves the principle that it has no right to a return on the amount of property cost which is represented by the balance in the depreciation reserve.

C. Appellee's method of computing the reproduction cost new of its property to arrive at the rate base on which it is entitled to a return requires that it should be reduced by the percentage thereof equal to the percentage which the amount of Appellee's depreciation reserve was of the undepreciated book cost of such property as of the same date.

D. The District Court's finding on the per cent of the reproduction cost new which should be deducted in arriving at the fair rate base value is a compromise fiat and has no support either in law or in fact.

DISCUSSION AS TO CONTENTION NUMBERED I.

I.

THE DISTRICT COURT'S FINDINGS OF FAIR RATE BASE VALUE PRODUCE FANTASTIC RESULTS.

In the *Missouri Rate* Cases (230 U. S. 474, at 501-2, 507) this Court was asked to find confiscation on a fantastic rate base—40% in excess of the utility's outstanding capitalization—such value having been calculated by the claimed application of that part of the rule of *Smyth* v. *Ames*, which fixes the rate base as the "fair value" of the property. In view thereof this Court there insisted on

> "clear and convincing proof that the value actually existed, and that the different items of property were estimated respectively by correct methods and in accordance with the proper criteria of value." (*Ibid*, at 501.)

The District Court's finding on fair rate base value produces in the instant case a result in Appellee's favor, as pointed out above (*supra*, 316), more fantastic than that shown in the *Missouri Rate* Cases and the same character of proof there required should be made applicable in the instant case.

The breakdown of the District Court's Finding of Rate Base Value is reproduced in the Appendix (p. 93). It shows:

(1) *Physical Plant Exclusive of Overheads.*

A. Plant Other than Land, Buildings and General Equipment—Referred to herein as Telephone Plant.

The increase in valuation of telephone plant over the corresponding book cost thereof ranges from $25,300,000

in 1923, representing 30.1%, to $6,800,000 in 1929, representing 4.5% of such book costs.

On January 1, 1919, the book cost of such plant was $52,510,213 (R. VII, 4076(a)), to which were added gross additions of $47,322,064 by 1923 and $124,024,889 additional by the end of 1929 (R. IV, 2776(a)-(b); R. VII, 4076(b)).

The valuation of telephone plant in 1930 and 1931 before giving effect to the District Court's reduction to offset the increase in Western's prices after 1929, exceeded by $8,000,000 and $8,900,000, respectively, the corresponding book cost of each such years. Such increases represent 5% and 5.5% of such respective book costs. After giving effect to such reduction, the valuation for each of such years was less by $1,700,000 and $10,360,000 than the corresponding book costs, or 1.1% and 6.4% thereof respectively. The gross additions were $18,900,000 for 1930 and $16,500,000 for 1931 (R. IV, 2776b-2677).

B. Buildings.

The increase in valuation of buildings over the corresponding book cost thereof ranges from $4,500,000 in 1923, or 51.5% thereof, to $4,900,000 in 1929, or 38.6% thereof. On July 31, 1911, the book cost of buildings was $2,300,000 (R. VIII, 4495) which increased to $8,487,000 by December 31, 1918 (R. VII, 4076(a)), to which latter amount were added gross additions of $1,030,411 by 1923, and $4,795,891 additional by the end of 1929 (R. IV, 2776(a)-(b); R. VII, 4076(b)). The increase in valuation of buildings over the corresponding book cost thereof in 1930 was $4,600,000 and in 1931 was $1,400,000, or 33.6% and 10.2% thereof respectively. The gross additions to buildings were for 1930 $1,435,000 and for 1931 $71,000 (R. IV, 2776b-2677).

C. Total Physical Property.

The increase in valuation of total physical property over the corresponding book cost ranges from $30,200,000 in 1923, representing 33%, to $13,000,000 in 1929, representing 7.8% of such book cost. The increase in valuation, before the District Court's adjustments, represented 7.9% in 1930 and 6.3% in 1931 over corresponding book costs thereof respectively. After the District Court's adjustments, such valuation was $4,200,000 more in 1930 than corresponding book costs, representing 2.4% thereof, and was less by $7,800,000 in 1931 than corresponding book costs, representing 4.3% thereof.

(2) *Overheads.*

The theoretical overheads in excess of the book overheads ranged from $16,000,000 in 1923 to $21,900,000 in 1929, to $23,100,000 in 1930 and to $22,900,000 in 1931 before the District Court's adjustments, and to $21,300,000 in 1930 and $19,400,000 in 1931 after the District Court's adjustments. The excess of theoretical overheads over book overheads ranged from 419% to 175% thereof.

(3) *Relation of Increase in Physical Plant Valuation to Increase in Overheads.*

In 1923 the increase in valuation of physical property is 89% greater than the increase in overheads. Beginning with 1927 the increase in overheads exceeds the increase in valuation of physical property. By 1929 the increase in overheads is 68% greater than such increase in valuation of physical property. In 1930 and 1931 the increase in overheads, before the District Court's adjustment, is 66% and 99%, respectively, greater than such respective increases

in physical property. On the basis of the combined increases representing 100%, each of these classes of increases represents the following percentage of such total:

	Overheads	Physical Property
1923	34.7	65.3
1924	36.5	63.5
1925	39.9	60.1
1926	45.8	54.2
1927	53.7	46.3
1928	59.8	40.2
1929	62.7	37.3
1930 (before D.C. adj.)	62.4	37.6
1930 (after D.C. adj.)	83.6	16.4
1931 (before D.C. adj.)	66.5	33.5
1931 (after D.C. adj.)	167.0	67.0*

*Red.

(4) *Going Value.*

Going Value ranged from $11,300,000 in 1923 to $16,900,000 in 1929; to $17,000,000 in 1930; and to $16,400,000 in 1931, and represented from 16.5% to 12.1% of corresponding outstanding capitalization (stock, surplus and funded debt).

(5) *Relation of Separate Classes of Increases to Total Increase in Valuation.*

In 1923 the increase in valuation of physical property represented $30,200,000 of the total increase in valuation of $53,200,000. Beginning with 1925 the increase in overheads and Going Value of $31,400,000 exceeded the increase in physical property valuation by $4,000,000. By 1929 the increase in valuation of physical property represented only $13,000,000 out of a total increase of $48,300,000. In 1930 the increase in valuation of physical property, after the

District Court's adjustment, represented only $4,200,000 of the total increase in valuation of $42,200,000. In 1931 the physical property was valued, after giving effect to the District Court's adjustments, at $7,800,000 less than the book cost thereof, although the finding of fair value exceeded the book cost by $28,000,000.

DISCUSSION AS TO CONTENTION NUMBERED II.

II.

APPELLEE'S METHOD COULD NOT POSSIBLY PRODUCE, FOR ANY YEAR OF THE LITIGATION, A REPRODUCTION COST NEW ESTIMATE OF ITS TELEPHONE PLANT, EXCLUSIVE OF OVERHEADS.

What Appellee Did Not Do.

Appellee offered appraisals of spot reproduction new values of land and buildings (R. I, 63-4). General Equipment was appraised at book cost (R. IV, 2674(a)).

Appellee's reproduction cost new estimate for each year of telephone plant was not based upon a current inventory and appraisal or upon any inventory or appraisal subsequent to 1911 (R. I, 25-6). The 1911 appraisal, for such property, aggregated $22,113,328 (O.R. IV, 1158). The amount of corresponding property covered by Appellee's reproduction cost new estimates of December 31, 1923, aggregated $109,708,255, and as of December 31, 1931, $173,495,428 (R. IV, 2600, 2660-1; Appendix, p. 93). The present discussion deals only with such telephone plant.

What Appellee Did.

Appellee presented reproduction cost new estimates of the property as of June 30, 1923 (R. IV, 2597-8) and as of December 31 of each year from 1923 to 1931, inclusive (R. IV, 2598-2681). These estimates, exclusive of overheads, were results obtained by adjusting the 1911 appraisal and the book cost of all subsequent gross additions and retirements to the date of each of the current estimates by means of index numbers purporting to measure the changes in cost levels. These estimates, exclusive of overheads, represented the following percentages in excess of corresponding book costs (Appendix, p. 93):

1923	30.15%
1924	27.96
1925	22.10
1926	15.12
1927	9.17
1928	6.02
1929	4.54
1930 (before D. C. Adj.)	5.02
1930 (after D. C. Adj.)	1.10*
1931 (before D. C. Adj.)	5.49
1931 (after D. C. Adj.)	6.35*

*Red.

Fundamental Error in What Appellee Did.

Appellee's reproduction cost new estimate of telephone plant, exclusive of overheads, proceeded upon the following assumption: that the property was put together historically but that during its entire life prices had been those current at the date of revaluation and that actual cost with such adjustment in price level would produce the reproduction cost new of such property as of such date.

Such procedure could not produce the intended results.

DISCUSSION.

A.

Appellee's use of the book cost of gross additions and retirements as the base to which it applied its index numbers, preserves in its result the higher costs (1) of manufacturing materials and (2) of construction labor, which prevailed prior to various improvements therein, and (3) of piecemeal construction.

(1) Appellee's reproduction cost new estimates of each year of the litigation preserve in their result the higher costs of manufacture which entered into the book cost of materials purchased prior to the improvements in Western's manufacturing methods, during the period beginning with 1911 to the date of each such estimate.

The District Court found that Western maintains a group of engineers who plan its manufacturing operations and constantly study the problem of cheapening its products (R. III, 2507). For the period 1916 to 1931, inclusive, the charges to Western's operating expense to cover their activities exceeded $13,000,000 (R. I, 510). The savings realized from the construction work are reflected in the eight annual reductions in Western's prices during the period 1921 to 1931, inclusive (R. VIII, 4512, 4561, 4564, 4567, 4573, 4581, 4585; R. III, 2508).

Appellee's justification for the American Company's Development and Research expense was based, in part, on the claim that its development work led to a cheapening of the costs of the products through improvements in the art, leading to new types of

products and also to cheaper costs of producing existing products (R. I, 611-2).

These improvements made through the work of both companies in respect to existing products are reflected *only* in those purchases made subsequent to the dates of such improvements. Appellee's use of the book cost of gross additions each year gives effect to the results of such improvements only for additions made subsequent thereto (*Chesapeake and Potomac Telephone Co. of Virginia* v. *Commonwealth of Virginia*, 147 Va. 43 (1927)). Appellee's annual purchases from Western chargeable to its construction accounts for the years 1923 to 1929, inclusive, ranged from $8,100,000 to $17,300,000 and for 1930 and 1931 were $16,500,000 and $8,800,000, respectively (R. III, 2516). Nothing said by this Court in the *McCardle* Case (272 U. S. 400 (at 417-8)) in respect to the necessity for the reproduction cost estimate having application to the identical and not to a substitute plant, requires the adherence to such earlier and more costly methods of manufacture.

(2) Appellee's reproduction cost new estimates of each year of the litigation preserve in their results the higher labor costs which entered into the book cost of gross additions made prior to the introduction of new and more economical construction methods beginning with 1911 to the date of each such estimate.

According to Appellee much of the American Company's Development and Research work since 1919 has been to develop improved and more economical methods of construction, including, among others, pole lines, manholes and conduit, and to improve going efficiency for all classes of construction (R. III, 2248-51). The books reflect such improve-

ments only to the extent of the gross additions made subsequent thereto.

(3) Appellee's reproduction cost new estimates of each year of the litigation preserve in their results the higher costs which are inherent in the extension of the small amount of plant in 1911 to meet the current requirements by piecemeal additions thereafter to the date of each such estimate (*Chesapeake and Potomac Telephone Company of Virginia* v. *Commonwealth of Virginia*, 147 Va. 43, at 52, 54 (1927).

Appellee's reproduction program contemplates that no part of the plant will be cut into service until the fourth year after the commencement of construction; 19.4% of the entire plant would be free of adjustment to the necessity or convenience of the service (R. IV, 2662a-70). Appellee's reproduction program contemplates also that after the commencement of service in the fourth year, a large proportion of the plant will be spare plant of no immediate use in the service (R. I, 24; O.R. II, 739; R. IV, 2662a-70). Obviously, under such a program, construction can proceed with an economy which it would be impossible to duplicate during the period of expanding operations which tax the capacity of existing facilities and require additions thereto to meet them. The latter conditions in the book costs involve a much greater proportion of small, discontinuous, isolated or localized jobs, the necessity for which would not exist in the reproduction program (R. II, 1476, 1488).

B.

Appellee's method of computing its material index assumes but does not prove that Appellee's gross additions each year beginning with 1911 consisted of the identical items and quantities as the selected items and quantities of the 1923 plant accounts which Appellee used in its computations.

What Appellee Did.

Appellee did not price out, on the basis of the prices current at June 30, 1923, the plant items making up the gross additions of each year prior to such date. Appellee dealt with the dollars of such gross additions to adjust them to the cost level of June 30, 1923, by means of index numbers which made use of representative plant items as of June 30, 1923.

Appellee developed an index of material prices and of labor costs, together with the ratios between them, for the purpose of adjusting, by means thereof, the book cost of gross additions and retirements of each year beginning with 1911 to the cost level of June 30, 1923. For each reproduction cost new estimate subsequent to June 30, 1923, Appellee developed similar index numbers for the purpose of converting the June 30, 1923, estimate and all gross additions and retirements subsequent thereto to the reproduction cost level prevailing at the end of each year thereafter (R. II, 1440). Obviously any error in the June 30, 1923, estimate will be carried over into each subsequent estimate.

It is essential to bear in mind, therefore, that the fatal errors shown herein which invalidate the June 30, 1923, reproduction cost new estimate invalidate as well the esti-

mate for each subsequent year of the litigation and render the yearly rate base predicated thereon fatally defective.

Material Index.

For the estimates subsequent to June 30, 1923, the items and quantities used in the preparation of the indices were based upon the items and quantities actually placed in service in each year (R. I, 16). Appellee, however, used a different method of computing the material index for the June 30, 1923, estimate. For the 1923 estimate Appellee selected items and quantities of the many kinds of product which comprised each plant account* on June 30, 1923, which items and quantities are referred to herein as "1923 specified items and quantities." These items and quantities Appellee determined were representative of the plant as it stood on that date (R. I, 15). For the one plant account "Central Office Telephone Equipment" Appellee selected eighteen different kinds of items which it considered representative of the account (O.R. IV, 1109).

Appellee computed for each of the years 1911 to 1923 the prices of such 1923 selected quantities of specified items in accordance with the following procedure:

(a) If Appellee's records revealed that it had in any year or years purchased such identical items, Appellee used the purchase price paid by it to price out the 1923 specified items and quantities to reflect the price thereof as of the date of such purchase.

(b) If Appellee's records did not show purchases, Appellee used Western's quoted prices of prior years to price

*Under the Uniform System of Accounts prescribed by the Interstate Commerce Commission, each "plant account" covers a definite class of plant, such as Central Office Telephone Equipment, Exchange Pole Lines, Toll Underground Cable, etc. (R. VIII, 4467).

out the 1923 specified items and quantities to reflect the price thereof as of the date of such quotation.

(c) For any 1923 specified item which had not been manufactured in prior years, Appellee estimated what such item would have cost in such prior period, had it been manufactured (R. I, 30, 40-1, 49).

Appellee totaled for each year from 1911 to June 30, 1923, the current prices, determined in the above manner, of the 1923 specified items and quantities, and computed the ratio between the yearly total in each case and the corresponding total as of June 30, 1923. Appellee considered such ratio as the measure or index of the variation in price between each of these prior years and June 30, 1923, of the quantities and items which actually were added to the plant during each such year.

Appellee determined a labor index in the manner described below (*infra*, 337) and also determined from its construction records the proportions of material and labor costs each year in each construction account covering gross additions. It then weighted the material and labor indices so determined to arrive at the composite index which Appellee considered was the index or measure of the variation in construction costs between each of the years prior to June 30, 1923, and that date (O.R. IV, 1172-4).

Fundamental Error in application of Material Index (as part of Composite Index) to Gross Additions of the period prior to June 30, 1923.

Appellee applied the composite index number as above determined to the book cost of the gross additions each year beginning with 1911 and considered that by so doing it had arrived at the cost of reproducing such gross additions at the cost level of June 30, 1923.

Appellee's conclusion assumes that the reproduction cost new estimate which is produced by pricing out for each year from 1911 to June 30, 1923, the specific items in the specific quantities selected by it from the 1923 plant accounts would also be produced (a) if the actual gross additions in each of said years beginning with 1911 contained different items than those of the 1923 plant; (b) if such gross additions contained different quantities of the same items as those of the 1923 plant; and (c) if such gross additions were subject to variations in relative price changes covering the various items making up each of Appellee's plant accounts in each year. By "relative price changes" we mean that where Western increases or decreases its prices from time to time, the per cent of increase or decrease respectively will not be the same for the different items making up each plant account at the time of such price change.

That the difference in items will substantially affect the result, needs no argument. That the difference in quantity will substantially affect the result, even though there is no difference in items and no change in the relative price level, is illustrated by two examples in the Appendix (Appendix, pp. 89-92). These examples show that a slight change in the relative quantities of the same three selected items—that is, a change from quantities of two, five and three to four, four and two respectively—will change the result over 10%, even though the identical items are used, and even though there is no change at all in the relative price level between the three items.

If, however, the relative price level in the above case were also changed so that the price level of Item No. 2 is lower than Item 1, and the price level of Item 3 lower than Item 2 to the extent of approximately 10% in each case, the result will be affected by over 13%.

The changes in result of 10% to 13% upon the basis of the above slight variation in quantity and in relative price level would be substantially modified if the variation in quantity or in price level were changed to a greater degree. The striking examples reproduced in the Appendix show that a combination of such variables is possible which may produce an absurd result, towit: that prices apparently decreased from 1912 to 1923 (Appendix, pp. 89-92).

The record shows that the items are not the same for each year beginning with 1911 (O.R. III, 979-995); that the quantities of identical items are not the same for each year beginning with 1911 (O.R. II, 653), and that the relative variation in price level as between items making up each of the plant accounts is not the same beginning with 1911 (O.R. IV, 1169-70; R. VIII, 4941).

Appellee's application of material index numbers on the basis of the assumptions made by it in connection therewith is fatally defective.

C.

Appellee's method of computing its labor index assumes but does not prove that Appellee's gross additions were constructed each year from 1911 to 1923 by a gang makeup corresponding to the theoretical gang makeup based on the average labor conditions of the entire period 1911 to 1923, inclusive, considered as a single unit of time.

What Appellee Did.

Appellee did not select, as in the case of material, any gang makeup representative of its practice at June 30, 1923, or at any other specified time. Instead Appellee developed a theoretical gang makeup which was computed in the following manner:

Appellee found the number of each class of workmen, such as linemen, groundmen, cable splicers, and foremen, shown by the construction department payrolls during each of the years 1911 to June 30, 1923, inclusive. Appellee, however, drew no distinction between the kind of work performed by them, whether construction or maintenance, and drew no distinction between the type of plant on which they worked, whether pole lines, cable, conduit, etc. (R. I, 37).

Appellee determined for each year the number of each class of workmen, and determined how many of each class would be required to provide a theoretical gang makeup consisting of one foreman and the same proportion of each such class as the proportion which the total number of each class bore to the total number of foremen. Appellants direct attention to the following table illustrating the theoretical gang makeup used by Appellee for the pole line account (R. I, 37):*

Year	Number on Payroll			Average Number per Gang		
	Foremen	Linemen	Groundmen	Foremen	Linemen	Groundmen
1911	72	136	136	1.0	1.9	1.9
1912	51	110	128	1.0	2.2	2.5
1913	67	172	151	1.0	2.6	2.3
1914	86	164	162	1.0	1.9	1.9
1915	56	126	123	1.0	2.3	2.2
1916	47	114	171	1.0	2.4	3.6
1917	51	102	146	1.0	2.0	2.9
1918	16	66	12	1.0	4.1	.8
1919	15	61	10	1.0	4.1	.7
1920	16	51	12	1.0	3.2	.8
1921	14	45	5	1.0	3.2	.4
1922	16	56	20	1.0	3.5	1.2
1923	15	60	28	1.0	4.0	1.9
Total	522	1,263	1,104			
Aver. per gang	1.0	2.4	2.1			

*Appellee's reproduction cost new witness testified:
"I took the number of foremen, the number of linemen and the

Appellee determined that the theoretical gang makeup for its index number calculations should consist of one foreman and the average number of the other workmen per gang determined by dividing the total number of workmen during the entire period as shown above by the total number of foremen. In the case of pole lines cited above, such typical gang consisted of one foreman, three linemen, and two groundmen (R. I, 37). Appellee assumed that this theoretical gang makeup for pole construction would be representative of and would reflect the actual construction gangs which did in fact construct the pole lines built in each of the years 1911 to 1923, inclusive.

Appellee, on such assumption, merely priced out the labor cost of this typical gang for each plant account on the basis of the average wages paid in all plant accounts during each of such years for each class of workmen composing it. It then computed the ratio between the labor cost of the theoretical gang for each such year to the labor cost of this same theoretical gang on June 30, 1923. Appellee considered such ratio as the measure or index of the variation in labor cost of the work done between each of these prior years to June 30, 1923 (O.R. II, 659).

Appellee's conclusion covering the labor index is predicated upon assumptions similar to those which it made in connection with its material index, to-wit: that the reproduction cost new estimate which is built up by pricing out for each year from 1911 to June 30, 1923, the specific types

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number of groundmen in the employ of the Company for the period of 1911 to 1923, inclusive, which I had for every quarter as I just described. These were general construction men who did line work, cable work and wire work and what not; they also did some maintenance work. I have before me the list of the number of each type of man for each year, and the average for that entire period is 1 foreman, 2.4 linemen and 2.1 groundmen, which I rounded out to 1, 3 and 2. That is the approximate average of the way work was done" (R. I, 37).

and number of workmen making up the theoretical gang used in the labor index computations, would also be produced (a) if the type of workmen in each of the years beginning with 1911 were different than the types used in the theoretical gang; (b) if the types of workmen were the same but the number of workmen of each type were different than the number of the same class of workmen used in such theoretical gang; and (c) if such different classes of workmen were subject to differences in relative increases or decreases in labor wage scale in each of said years.

The examples used in connection with the material index may be used also to show the result of the existence of each of the three variables in connection with the gang makeup Appendix, pp. 89-92).

The record shows that the gang makeup was different for each year (*supra*, 338), and that the relative change in wage scale was not the same for each class of labor (O.R. IV, 1177).

Appellee's application of the labor index numbers on the basis of the assumptions made by it in connection therewith is fatally defective.

D.

On the record it is impossible to determine the extent of distortion produced by Appellee's use of book cost of gross additions and retirements and index numbers to arrive at its reproduction cost new estimate.

Failure to Make Appraisal Fatal to Appellee.

In the absence of an actual appraisal, the effect of the use of book costs to arrive at the reproduction cost estimate cannot be determined. The consideration that the gross additions during each year of the period beginning with 1923

approximates the average yearly gross additions of the theoretical construction period assumed by Appellee has no application to the determination of the effect of the conditions under which the construction would take place in either case (*supra*, 332). In the absence of an appraisal, the effect of the use of the cross-section of 1923 plant plus the use of the theoretical gang makeup cannot be determined.

Appellee's Measure of Distortion Is Itself Based on Unproved Assumption.

Appellee claims that only a negligible distortion of the picture can possibly result from Appellee's assumption that it purchased and placed in service in every year beginning with 1911 the identical items in the identical quantities as those of the 1923 plant account which Appellee used in its material index, and from Appellee's assumption that the actual construction of each year beginning with 1911 would be by a gang makeup identical with the theoretical gang makeup which it used in its labor index. In support of its claim, Appellee produced a study of approximately 5% of the plant in service during 1923 (O.R. II, 653-4), representing all of the plant actually installed in three outside plant accounts during the period 1920 to June, 1923, inclusive—pole lines, aerial cable and underground cable. This study purported to show a difference of less than one-half per cent between the result of pricing out the actual installation on the basis of the June 30, 1923 prices, and of applying the index numbers to the book costs of the accounts in the manner above stated (O.R. IV, 1548). Appellants' position is that such study does not prove Appellee's claim. Such study is itself predicated on the assumption that price variations in each class of plant were horizontal.

The principal variations in an account like poles do not consist of variations in kinds of items but rather in respect to the lengths of the same kind of item. Similarly the principal variations in an account like cable do not consist of variations in kinds of items but rather in sizes of the same kind. The factors which chiefly determine changes in price for either class would not involve such substantial variations in size as to produce serious variations in price changes between sizes. Copper and lead costs are the controlling factors in cable prices (R. VIII, 4561).

But this same condition cannot be assumed to exist in such an account as "Central Office Telephone Equipment." Appellee's material index used a cross-section of that one account consisting of eighteen widely different classes of plant, as indicated in the margin.* The record shows that a large multiple section of central office switchboard which would be included in this account includes many different kinds of items going to make up the 100,000 or more piece parts manufactured by Western in 18,000 different combinations (R. II, 1923). The record also shows that the price variations of the items which go to make up central office equipment are not uniform. Western's reduction in price of 4.9% in 1927, as found by the District Court (R. III, 2508), is the average result of variations in approximately fifty classes of telephone apparatus, of which many constitute the one group designated as "central office telephone equipment." But such variations within

*These items are (O.R. IV, 1169):

Subscribers' sections.
Subscribers' cord circuits.
Subscribers' line circuits.
Outgoing trunk multiple jacks.
Message registers.
Outgoing call circuits.
Trunk sections.
Subscribers' multiple jacks.
Incoming trunk circuits.
Toll sections.
Toll primary answering jack circuits.
Toll secondary answering jacks.
Toll cord circuits.
Toll recording trunk answering jacks.
Toll line multiple jacks.
Toll recording cord circuits.
Frames and protectors.
Power plants.

that one group range from 5% for keys and key units (R. VIII, 4941), forming parts of cord circuits, to 24% for protector blocks forming a part of the frames and protectors, to 18% for switchboard lamps (R. II, 1923), to 11% for relays (R. II, 1923), to 10% for straightforward trunking mounting units (R. VIII, 4941), to 28% for the relay call indicator mounting units (R. II, 1923). Similar wide range is shown in the price increase of November 1, 1930, covering the various kinds of items making up central office equipment (R. VIII, 4944). More than mere assumption is necessary to prove that Western's price policy prior to 1920 was different than that for the period subsequent thereto.

Appellee's application of index numbers to book costs computed in the above manner could not possibly produce a reproduction cost estimate as of June 30, 1923. As this estimate is the basic link for each subsequent estimate, each of them is likewise fatally defective.

DISCUSSION AS TO CONTENTION NUMBERED III.

III.

THE REPRODUCTION COST NEW ESTIMATES OF TELEPHONE PLANT CAN NOT MEASURE THE FAIR VALUE NEW OF SUCH PROPERTY.

A.

The District Court's findings of Fair Value New are Inconsistent With Its Findings on Western's Profits and Prices.

The District Court's findings for each of the years 1923 to 1929, inclusive, that Appellee's reproduction cost new

estimate, which made use of Western's current prices during the year of revaluation as an integral part thereof, represented the undepreciated fair value for that year, are inconsistent with:

(1) The District Court's findings that the reasonableness of Western's earnings from Bell business in each of the years 1923 to 1929, inclusive, should be determined on the basis of the average experience of a period of years considered as a single unit of time and not for any one year thereof (*supra*, 238);

(2) The District Court's finding that Western's earnings from the Bell System bear relation to its earnings from business with Appellee on the basis of the average experience of a period of years considered as a single unit of time and of any one year thereof (*supra*, 277);

(3) The District Court's finding of Western's rate of earnings on investment from Bell business, in each of the years 1923 to 1929, inclusive, done on the current prices used in Appellee's reproduction cost new estimate of the same years. Such rate of earnings was grossly in excess of the average rate of earnings on which it based its reasonableness of each year's results, and produced excessive returns to Western's investors (*supra*, 279);

(4) The District Court's finding that volume production and advance estimates have been essential factors in Western's price policy during the period of the litigation (R. III, 2507). The District Court's finding on fair value assumes that the advance estimates to Western at the beginning of the nine or ten-year construction period covering an increased and assured volume of business would have no effect on its prices. Yet Western made six annual reductions in its prices beginning with 1924; the

1923 prices were reduced over 30% by the end of 1929 (R. III, 2508).

(5) The District Court's findings of Western's earnings and investment in Bell business separated from non-Bell business on the basis of Appellee's presentation thereof which can be justified, if at all, only on the basis of the earning results of a period of years considered as a single unit of time and not of any one year thereof (*supra*, 266).

The District Court found the rate base for the years 1930 and 1931 by reducing Appellee's reproduction cost new estimate to eliminate the effect of the 10.2% increase in Western's prices made in 1930. Such adjusted fair value in each year therefore gives effect to the 1929 prices; the District Court's findings thereof are therefore subject to the same fatal defects as those just stated in respect to its 1929 valuation (*supra*, 344).

B.

The basis upon which Appellee made its presentation of Western's Profits and Prices precludes the possibility of using Western's current prices in the reproduction cost new estimates as fair value.

To arrive at the portion of Western's earnings allocable to Bell business considered as a unit and to Appellee as a component part thereof separately, Appellee's presentation distributed the variations between actual and standard costs of entire production between Bell and non-Bell sales and between the latter sales and those to Appellee. Such variations gave effect, among others, to actual volume compared to the estimated volume of manufactures of a given year (*supra*, 253). The showing

of such an effect precludes the possibility of varying the volume of production of any item or items in any given year without varying correspondingly the effect of such changing volume on the amount and character of the variations.

The reproduction program of Appellee's property necessarily involves the purchase of a different yearly volume of equipment composed of different items and of different quantities thereof than the actual purchases made by Appellee in the year of revaluation. No showing was made of the net effect of Western's profits from business to be done with Appellee under the assumed program as a result of the difference in variations between actual and standard cost of producing such equipment.

Appellee presented for 1930 (R. IV, 2662(a)), but refused to present when requested by Appellants so to do (R. I, 54) a construction program covering the 1924 to 1929 reproduction cost estimates from which could be seen the difference between the actual gross additions covering purchases of specific kinds of equipment by Appellee in the year of revaluation and the annual corresponding construction covering similar purchases which Appellee contemplated under its construction program (R. I, 45). Comparing the construction program for the 1930 reproduction cost estimate with the actual construction of 1930:

Appellee's reproduction program for the year 1930 calls for gross additions of central office equipment of $10,000,000 in each of three years, $9,000,000 in one year, $7,000,000 in one year, $4,000,000 in one year, and $1,800,000 in one year, a total of $51,400,000 (R. IV, 2662a). Appellee's actual gross additions in 1930 of the same equipment was $3,793,000 (R. IV, 2776b). Appellee's construction program in the 1930 estimate calls for construction of $8,000,-

000 underground cable in one year, $7,000,000 in each of two years, $5,000,000 in each of two years, $3,000,000 in each of two years, and $1,000,000 in each of two years. The actual construction in 1930 was $2,685,000 (R. IV, 2776(b)). On the other hand, the construction program calls for gross additions of $6,000,000 of station equipment in each of two years, $5,000,000 in each of two years, $4,000,000 in each of two years, $3,600,000 in one year, and $1,000,000 in one year. The actual gross additions in 1930 were $8,757,000 (R. IV, 2776).

DISCUSSION AS TO CONTENTION NUMBERED IV.

IV.

APPELLEE'S REPRODUCTION COST NEW ESTIMATES OF ALL PHYSICAL PROPERTY FOR EACH OF THE YEARS 1923 to 1929, INCLUSIVE, AND THOSE FOR THE YEARS 1930 AND 1931 AS ADJUSTED, DID NOT MAKE AN HONEST AND INTELLIGENT FORECAST AS TO THE PROBABLE PRICES AND WAGE LEVELS DURING A REASONABLE PERIOD IN THE IMMEDIATE FUTURE.

In determining present value, not only must consideration be given to prices and wages prevailing at the date of revaluation, but also "in the light of all the circumstances, there must be an honest and intelligent forecast during a reasonable period in the immediate future" (*McCardle v. Indianapolis Water Co.*, 272 U. S. 400). Whether the reasonable period is the assumed construction period (R. IV, 2662(a)) or is a longer or shorter period has not, as far as Appellants are aware, been determined by this Court.

In the instant case, the District Court adopted as the fair value new of the physical property for each year of the period 1923 to 1929, inclusive, the average of the reproduction cost new estimates at the beginning and end of each year (Appendix, p. 86). For 1930 and 1931 it used the same basis after adjusting Appellee's reproduction cost new estimate to eliminate the effect of the 1930 increase in Western's prices. The fair value new therefore reflects in each case the current prices of the year of revaluation. The assumed construction period for the reproduction cost new estimates of 1923 to 1927, inclusive, was nine years; for the later estimates, ten years (R. I, 43, 47).

Whatever may be the rule in other cases, there are special reasons in this case why fair value new as determined by the District Court does not meet the specifications of the *McCardle* Case.

A.

Western's current prices used in each Reproduction Cost New Estimate from 1923 to 1929, inclusive, and for 1930 and 1931, inclusive, as adjusted by the District Court, cannot represent fair value determined in compliance with the McCardle Case.

Western's current prices used in the reproduction cost new estimates of 1923 to 1929, inclusive, and for 1930 and 1931, inclusive, as adjusted by the District Court, were established under a price-reducing policy of the manufacturer, as found by the District Court (R. III, 2508). From 1924 to 1929, inclusive, prices were reduced over 30% (*supra*, 294).

The averaging of the beginning and end of the year estimates gives only partial effect to the downward trend of

such prices within the same year. Such averaging process, to produce fair value is based on the assumption: that if Appellee were to reproduce the 1923 property or the property in service in any of the six years, it would contract with Western for all the material during a nine or ten-year period on the basis of the first year's prices without making provision for forecasting probable prices during that period or even at the end of the first year of such period. Such assumption is contrary to Appellee's own practice. Appellee's engineering studies in 1926 covering future construction took into account forecasts of substantial reductions in Western's prices in 1933-1934 (R. IX, 5018B, 5024A). During the period 1923-1929, inclusive, Appellee's gross additions to physical plant covering Western's purchases were 194% of the book value of such plant on January 1, 1923. Yet the per cent of such total gross additions made in any one year of that period did not exceed 17.9% of such total.

The District Court's findings of fair value for 1930 and 1931 gave effect to the 1929 prices and are therefore subject to the same limitation as that stated herein in respect to the reproduction cost new estimate of 1929.

B.

The District Court's acceptance as fair value of the average of the beginning and end of the year reproduction cost new estimates of buildings is contrary to its findings on Western's profits and prices.

The District Court allowed as proper operating expenses Appellee's deductions of over $7,000,000 from Western's current income for the years 1924-1927, inclusive, to make up the excess of original cost of plant in service over its prognosticated reproduction value during the ensuing 10 to 15 years (*supra*, 308). It thus appears that when Ap-

pellee deemed it for the best interests of its investors to reflect the fair value of property, it made the forecast which this Court in the *McCardle* Case held should be made in determining the fair value of property for rate-making purposes. The District Court accepted such presentation and based its findings of Western's profits thereon.

The District Court's findings on Appellee's rate base value and on Western's profits, therefore, involve the principle that the telephone rates are to be established on the basis of giving effect to the book cost or reproduction cost new of property, whichever is higher.

Appellants direct attention to the study made by Western in 1927 in the regular course of its business. It shows that in respect to the Hawthorne buildings, located in Chicago, the probable average level during the ten-year period from 1931 to 1940, inclusive, was 84% of the 1927 level and 91% of the 1931 level (R. V., 3746d), 1927 cost level was within 4% of the building cost level of 1928-29 (R. IV, 2679).

C.

Foreseeable conditions indicating cheapening of plant and reduction in prices were disregarded by the District Court.

On the basis of the cost reducing activities of Western and the American Company, already discussed, a foreseeable condition of cheaper plant existed in each of the years beginning with 1923 for a reasonable period thereafter. Appellee's claimed justification for much of the expense of the American Company's Development and Research work was predicated on the development by that work of the telephone art during the period following 1923 to the point

where reasonable expectation may be had that in the distant future the cost of new plant to be added will be cheapened in relation to Appellee's existing plant now in service (R. I, 695). Appellee claimed also that the benefits of such work subsequent to 1932 would be reflected in the plants of the Associated Companies and particularly in the exchange plants to a greater extent than for the period prior thereto (R. I, 695). On that basis a foreseeable condition exists of cheaper plant. Appellee's engineering studies in 1926 contemplated reductions in 1933-34 (R. IX, 5018C, 5024A). In these essential facts the record in the instant case even for the years prior to 1930 differs from that presented in the *McCardle* Case (272 U. S. 400, at 412). In these essential facts, the present record presents for each year beginning with 1923 a parallel situation to that which appeared in *Los Angeles Gas & Elect. Co.* v. *Railroad Commission*, 289 U. S. 287 (1933), covering the reproduction cost new estimate by the utility. Moreover events since 1929 have rendered unreliable prognostications on the basis of prices of that or prior years on which to predicate a finding of fair value for that year and thereafter in support of a finding of confiscation (*Los Angeles* Case, *supra*).

In respect to the 1930, 1931 and 1932 valuations, the District Court held:

> "Considering, however, the reduction in prices prior to November 1, 1930, we are of the opinion that plaintiff is entitled to a maintenance of the 1930 price level during the years 1931 and 1932."

As already shown, the price reduction policy did not reflect the reasonableness of the profits of Western after the reduction (*supra*, 294); the 1929 prices in effect in 1930 prior to November 1, 1930, were excessive (*supra*,

305). The District Court's conclusion that the 1929 prices which were already too high on the basis of 1929 conditions should be maintained during the period of the depression, is clearly untenable.

DISCUSSION AS TO CONTENTION NUMBERED V.

V.

THE OVERHEAD CHARGES INCLUDED IN APPELLEE'S REPRODUCTION COST NEW ESTIMATES FOR EACH YEAR WERE IMPROPERLY DETERMINED TO FORM THE BASIS FOR A VALID FINDING OF FAIR VALUE NEW.

Preliminary Statement.

The rule of *Smyth* v. *Ames* was originally intended to check the book investment of property by the lower current costs thereof. Beginning with the *Willcox* Case, the application was intended to reflect the higher current costs of labor and material, particularly during and since the World War. In the course of the present litigation, such higher current costs had disappeared; but the application of the rule is made by the District Court to give to Appellee the benefit of theoretical overheads which are developed under a construction program, which bear relation neither to the historical experience of Appellee nor to experience of any other company, and whose amounts are dependent solely upon the opinion of interested witnesses.

Prior to 1920 Appellee included in its capitalized overheads the item designated as "Engineering." But interest during construction, taxes, insurance, traffic engineering, commercial engineering and general expense charged to construction were not capitalized, but were charged to

operating expense (O.R. V, 1731). The capitalized overheads for the period prior to 1920 ranged from 1.3% to 2.9% of the book cost of gross additions of that period.

From 1920 to 1930, inclusive, Appellee capitalized all the overheads which it had not capitalized prior to 1920 excepting only taxes and insurance during construction, which latter two items continued to be charged as operating expense. The capitalized overheads for the period 1920 to 1930, inclusive, ranged from 5.1% to 8.9% of the book cost of gross additions of that period. The capitalized overheads in 1931 were 9.7%.

The theoretical overheads included in Appellee's reproduction cost new estimates covered the amounts which Appellee estimated would be incurred by it on a reproduction program of its property during that portion of the nine or ten-year construction period during which the newly constructed property would not be in actual use in the public service (O.R. II, 668; R. I, 21, 56). Such theoretical overheads covered all of the overhead items which Appellee had not capitalized on its books prior to 1931. Such theoretical overheads ranged from 16.9% to 18.2% of the combined labor and material costs in the reproduction cost new estimates. The excess of theoretical overheads over corresponding book overheads in each of the reproduction cost new estimates was (Appendix, p. 93):

1923	$16,084,801
1924	17,159,795
1925	18,232,454
1926	19,116,952
1927	19,847,020
1928	20,840,017
1929	21,962,866
1930 (before D. C. adj.)	23,073,281
1930 (after D. C. adj.)	21,348,775
1931 (before D. C. adj.)	22,861,466
1931 (after D. C. adj.)	19,401,003

A.

Appellee is not entitled to capitalize overheads which it charges as operating expense, under the special conditions of this record.

Taxes and insurance during construction should not be capitalized in Appellee's reproduction cost new estimate for each of the years 1923 to 1930, inclusive, as these items are included in the District Court's findings of operating expenses for the same years (Appendix, p. 128). The aggregate of these two items included in such reproduction cost new estimates range from $2,600,000 to $6,300,000 (R. IV, 2598-2662).

Appellee's presentation of revenues and expenses before the Commission on the basis of which it was granted the increase in rates in 1920 (O.R. IV, 1281; O.R. II, 770), and Appellee's presentation before the District Court on which it procured its temporary injunction (O.R. II, 163-175; O.R. V, 261), were in each case predicated on the inclusion as operating expense items which it now claims should be capitalized. Had it so capitalized these items in the past, such presentations would have shown increased revenues which might have affected the relief granted Appellee. Fair play requires that Appellee should not repudiate the basis upon which it has made such representations to unjustly enrich itself at its subscribers' expense.

B.

Appellee's method of computing the theoretical overheads unjustly enriches its investors on the additional capital invested during the period of the litigation.

Appellee's investors doubled their investment during the period of the litigation by purchasing its securities at par for stock and below par for bonds (O.R. VI, 2120b; R. VIII, 4792-4). The overheads in Appellee's reproduction cost estimate in excess of those actually incurred increase with the dollars of investment included therein. The excess applicable to the additional investment made during the period of the litigation by Appellee's investors merely represents an appreciation of such additional investment over the amount actually placed therein, for which such investors have paid nothing. It is one thing to consider the revaluation of investments made in the past to reflect current cost values, and quite another thing to permit the current investment during the litigation to enhance in value for rate-making purposes through the sole circumstance of being placed therein.

C.

Appellee's inclusion of theoretical overheads in excess of book overheads on the basis that the property will be rebuilt is a repudiation of the basis on which its current price estimates of the telephone plant were predicated.

As noted above, the reproduction cost estimates of telephone plant proceeded on the assumption that the property was put together historically (*supra*, 329).

It is a repudiation of that basis to assume for the purpose of increasing the overheads that the property will

not be put together historically, but will be rebuilt under a different plan. Appellee's reproduction cost new estimate preserves in its result all the increased cost of the historical construction of the property and all the increased costs arising from the theoretical reconstruction program. Estimates so determined should not be accepted as the measure of fair value upon which to base a finding of confiscation.

DISCUSSION AS TO CONTENTION NUMBERED VI.

VI.

THE RATE BASE VALUE WHICH IS BASED ON APPELLEE'S BOOK COST OF PROPERTY IS MORE THAN THE FAIR VALUE THEREOF ON WHICH APPELLEE IS ENTITLED TO A RETURN.

(1) Appellee's book cost of property preserves in its result the higher cost of piecemeal construction and the higher costs of manufacture and of construction methods in respect to all portions thereof added prior to the improvements in such methods. Such improvements continued throughout the period of the litigation (*supra,* 330).

(2) In view of the annual reductions in Western's prices, the price reduction policy of Western and the development and research activities of the Bell System—the current book costs of the telephone plant in any one year of the litigation are higher than would result from the "honest and intelligent forecast" of the immediate future as required by the *McCardle* Case to form the measure of fair value new (*supra,* 348). Appellee's telephone plant represents more than 80% of its entire plant account (Appendix, p. 93).

(3) Appellee uses in the regular course of business the straight line method of computing depreciation expense charges on the basis of the book cost of depreciable property (*infra,* 365). Depreciable property represents more than 90% of all property revalued. Appellee guarantees thereby to its investors the return of the principal of their investment irrespective of the reduction in prices which Appellee as part of the Bell System undertakes to effect through development and research work. According to the American Company, "it is fairly certain that investors in telephone securities are not primarily interested in property as such but are interested in safeguarding the money in the property which, so far as it will some day be lost in operations, is therefore what should be covered by the depreciation provision" (R. VI, 3781-2; *infra,* 436). If that be fairly certain of other investors, certainly it must be certain of the American Company itself, the operator of the development and research work, the financing agency of and the *investor* in Appellee.

(4) Western's current prices of the years 1924 to 1929, inclusive, which entered into the book cost of current additions each year of the litigation reflect excessive profits to Western, and as such inflate the book cost of property of that period (*supra,* 304, 315).

(5) The book cost of the property since 1929 clearly exceeds the current fair value of the property (*supra,* 330).

(6) The Chicago intrastate rate base value used by Appellants which gives effect to such book cost exceeds outstanding capitalization (stock, surplus and funded debt) by the following amounts (Appendix, p. 88):

1923	$ 1,423,901
1924	4,171,188
1925	11,093,625
1926	13,928,596
1927	19,000,526
1928	20,881,882
1929	21,225,932
1930	21,676,619
1931	23,869,773

DISCUSSION AS TO CONTENTION NUMBERED VII.

VII.

THE DISTRICT COURT'S METHOD OF COMPUTING GOING VALUE AS PART OF THE RATE BASE WAS IMPROPER AND UNDULY BURDENED THE TELEPHONE SERVICE CHARGES DURING THE PERIOD OF THE LITIGATION.

What the District Court Did.

The District Court found that the Going Value was 8% of the reproduction cost new estimate of the property for each year. The amounts allowed for Going Value applicable to Chicago intrastate business were (Appendix, p. 86):

1923	$11,340,894
1924	12,201,330
1925	13,148,371
1926	14,026,833
1927	14,809,376
1928	15,777,021
1929	16,877,281
1930	16,977,619
1931	16,391,666

Such amounts represented the following per cent of total outstanding capitalization (stock, surplus and funded debt)

of each year, including therein all the additions to capital made during the period of the litigation:

1923	16.5%
1924	15.8
1925	16.2
1926	15.6
1927	15.0
1928	14.3
1929	13.9
1930	12.8
1931	12.1

The District Court's allowance represents less than that claimed by Appellee (R. III, 2393) on the basis that Going Value should be allowed in the amount of 15% of each year's reproduction cost new estimate (R. I, 24).

Appellants contended that the amount to be allowed should not exceed the allowance by the Commission's 1923 Order (R. III, 2461). Appellants contended (R. III, 2568), and now contend, that the proper amount is $4,009,692, which is the intrastate portion of such allowance, which allowance is the same as that prescribed by the 1920 Order of the predecessor Commission, effective January 1, 1921 (O.R., 1294).

A.

The District Court's method of computing Going Value unjustly enriches Appellee's investors on the additional capital invested during the period of the litigation.

The application of a percentage figure to the reproduction cost estimate of each year to determine the amount of Going Value increases such amount as the dollars invested in Appellee's property increase and are included in such reproduction cost estimates.

During the period of the litigation Appellee's investors doubled their investment by purchasing its securities at par for stock and below par for bonds (*supra*, 355). As in the case of excess theoretical overheads, discussed *supra*, 355, the Going Value applicable to the additional investment made during the period of the litigation by Appellee's investors merely represents an appreciation of such additional investment over the amount actually placed therein, for which such investors have paid nothing. Such allowance therefore unjustly enriches them at the expense of the telephone subscribers.

The method followed by the District Court in the instant case is not the method which was followed by the Statutory Court in the case of *New York Telephone Co. v. Prendergast*, 36 Fed. (2d) 54 (1929). In that case the Court reduced the $48,000,000 claimed by the Company and the $35,000,000 allowed by the master for Going Value to $10,000,000. Of the amount allowed $7,500,000 was made applicable to New York City as part of the rate base value for 1924, the first year covered by the decree. Such allowance was not increased as part of the rate base of the subsequent years of the litigation to 1928, although the rate base of the last year covered by the decree exceeded that of the first year by $152,000,000 (36 Fed. (2nd) 54, at 68) or 30% of the 1924 rate base. The allowance represented 2.2% of the rate base as found by the District Court for the year 1928 and less than 4% of the 1924 rate base, which exceeded $300,000,000.

B.

The use by the District Court of Appellee's reproduction cost new estimate of each year as the base to which it applied the 8% figure to determine Going Value, renders the amount thereof arbitrary and grossly excessive.

For the reasons stated above, Appellee's reproduction cost new estimate was arbitrary, grossly excessive, and cannot be accepted as a measure of value (*supra*, 324, *et. seq.*). The application of a percentage to such figures results in a Going Value which is excessive in the same proportion as the reproduction cost new estimate.

DISCUSSION AS TO CONTENTION NUMBERED VIII.

VIII.

THE DISTRICT COURT'S FINDINGS ON FAIR RATE BASE VALUE SHOULD HAVE DEDUCTED FROM THE REPRODUCTION COST NEW OF THE DEPRECIABLE PROPERTY OF EACH YEAR A PERCENTAGE THEREOF EQUAL TO THE PERCENTAGE WHICH THE AMOUNT OF APPELLEE'S DEPRECIATION RESERVE WAS OF THE UNDEPRECIATED BOOK COST OF SUCH PROPERTY AS OF THE SAME DATE.

What the District Court Did.

The District Court's findings on depreciation in valuation represent a compromise. Appellee's presentation was made on the basis that the reproduction cost new estimate should be reduced by the percentage which it determined

the property in service had deteriorated in condition from a perfect condition as new property, as revealed by an inspection of the property on December 31, 1930, plus the general knowledge of its operations prior thereto to 1923 (R. I, 73; R. IV, 2682). Appellee's presentation showed that 9% should be deducted for the years 1923 to 1928, inclusive, and 8% thereafter (R. III, 2390).

Appellants' position before the District Court was that from the value new as of any given date determined either on the basis of the book cost or reproduction cost new estimate of the property, there should be deducted therefrom the percentage thereof equal to the percentage which the amount of Appellee's depreciation reserve was of the undepreciated book cost of such property as of the same date (R. III, 2456-8). Such percentage ranged from 29.37% to 27.98% during the period 1923 to 1928, inclusive, and from 28.11% to 26.70% for the period 1929 to 1931, inclusive, on the basis of the recorded depreciation expense charges (Appendix, p. 94); and ranged from 29.83% to 27.37% during the period 1923 to 1928, inclusive, and from 26.28% to 25.43% for the period 1929 to 1931, inclusive, on the basis of the District Court's findings on depreciation expense charges (Appendix, p. 94). The grounds for Appellants' position, stated in its requested findings (R. III, 2456-8) are those presented herewith.

The District Court, without discussion, found that the deduction should be 16% for the years 1923 to 1928, inclusive, and 15% thereafter (R. III, 2505). The dollar differences between the deductions on the basis of the District Court's findings and on the basis of Appellants' position are (Appendix, p. 87):

1923	$19,605,570
1924	19,628,890
1925	19,919,782
1926	20,251,240
1927	21,344,013
1928	22,423,092
1929	23,796,966
1930	21,964,245
1931	22,005,810

To the District Court's findings Appellants assigned error (R. III, 2567-8).

A.

That portion of the depreciation reserve which represents the advance contributions made prior to and during the period of the litigation, inclusive, for anticipated depreciation on contemplated future additions to central office equipment and buildings, should be deducted from the rate base to prevent the unjust enrichment of Appellee.

Appellee's book investment in buildings and central office equipment represents the following per cent of total depreciable property* (*infra*, 403, Appendix, p. 96).

1923	41.44%	1927	40.00%
1924	40.83	1928	41.27
1925	41.23	1929	41.17
1926	41.47	1930	41.36
		1931	41.94

The advance contributions for anticipated depreciation charges, included as part of the depreciation expense charges, are all reflected in the depreciation reserve account before the date when Appellee actually places into service the contemplated future additions. The funds go into plant or working capital (R. II, 1191).

One of the necessary consequences of Appellee's practice is that it must give credit currently for all income on the

*The dollar amounts are shown (Appendix, p. 96).

total amount of the advance contributions prior to the date (after the date of placing in service of the additions) when Appellee would under the law be entitled to such advance contributions as current reimbursements of property consumption together with the income thereon (*infra,* 411).

Appellee having invested the funds in property placed in service, credit must be given for all income which such property produces by virtue thereof, whether the rate base is determined on the basis of book cost or reproduction cost estimate. Such credit must include not only the income on the advance contributions made during the period 1923-1931, inclusive, but also the income on the advance contributions made prior to 1923 and reflected in the depreciation reserve as of December 31, 1922, and on the income on said contributions during such prior period.

What portion of the depreciation reserve is represented by such accumulations the record does not show and Appellee has made no showing to prove. But Appellee did admit that the advance contributions "like all the rest of our depreciation expense, finds its way into the general funds of the company and it goes into plant and working capital" (R. II, 1191).

The depreciation in existing property which the District Court found was only a portion of the depreciation reserve (Appendix, p. 87; *supra,* 361):

As the record does not show what per cent of the depreciation reserve is represented by the cumulative advance contributions, the remainder of the depreciation reserve should be held to represent the advance contributions. By deducting the entire depreciation reserve, the same result would be accomplished as by giving credit for the income on these funds included therein.

B.

The use by Appellee of the straight line method of determining depreciation expense charges on property in service involves the principle that it has no right to a return on the amount of property cost which is represented by the balance in the depreciation reserve.

Appellee uses the straight line method of determining depreciation expense charges on property in service (O.R. V, 1672). This method is intended to provide a fund which does not require any additional income accumulations thereon to provide the full reimbursement of the capital consumption to which Appellee is entitled under the law (*United Railways* v. *West,* 280 U. S. 234, 284, note 55).

Appellee's use of this method can be justified only on the theory that Appellee has elected to treat the funds represented by the balance in the depreciation reserve as payment for a portion of its capital investment in the service consumed and to be consumed in respect to which it is entitled to reimbursement during the service life of the property.

Turn to the mortgage field. A issues $1,200,000 principal amount of bonds, due in ten years. A is required to deposit with T as depositary to apply on principal, $120,000 yearly, in equal monthly installments of $10,000. The deposits as made monthly may be either *pro tanto* payment of the principal or deposits for the better securing of the debt. The mortgage indenture usually provides which situation shall prevail. If it is the first—the debt of A is reduced to the extent of the deposit; interest thereon from A ceases; the holder of the bonds evidencing the amount of indebtedness covered by the deposits ceases to enjoy any of the benefits of the security of the mortgage,

but does enjoy the benefit of any earnings on the deposit. If it is the second—A's debt is not reduced by the deposit and A's obligation to pay interest on the full amount of the debt is not discharged, but A is entitled to receive the benefit of any earnings on the deposit.

Where the earnings on the deposit and on the principal debt are the same, it is not material whether the deposit is prepayment or sinking fund, in the absence of special considerations such as the default or bankruptcy of the Trustee. The fact that T may be the owner of the bonds issued by A in its own right or may be trustee for the owners or may be agent for the owners or may act in any other capacity for the owners of A's obligations, would not change the result.

The mortgage situation is analogous to Appellee's situation in respect to its depreciation expense charges and depreciation reserve. Assume that Appellee's investors have made available to it $1,200,000 to invest in plant to be used by its subscribers. Such subscribers have the obligation to pay as part of the cost of the service rendered to them, through rates, $1,200,000 in equal monthly installments being determined upon the basis of payment in full, in ten years, and being made on the basis that when received by Appellee they will go into its treasury as its own funds free from the claims of the subscribers and on which it will be entitled to receive all income derived therefrom, including a return (for its investors). Receipt of the installments on that basis constitutes an election to treat the amount of each such monthly installment as a part payment for the property consumed or to be consumed in the service during such ten-year period.

Warrant for the proposed principle is found in the statutory provisions on the subject-matter of depreciation in

the States of Arizona, Indiana, Minnesota, Missouri, New Jersey, Ohio, Oregon, Tennessee, Utah and Wisconsin (*infra*, 386).

In the dissenting opinion in the *United Railways* Case (280 U. S. 234, at 286) it was stated:

> "Nor need we express an opinion on the relation between a utility's depreciation reserve and the valuation of the accrued depreciation of its property. See Proposed Report of the Interstate Commerce Commission, note 14, *supra*, at pp. 20-24. While it is true that the annual depreciation charge does not purport to measure the current actual consumption of plant, it may be that the credit balance in the depreciation reserve is good evidence of the amount of accrued depreciation. See *New York Teleph. Co. v. Prendergast*, District Court, S. D. N. Y., decided November 7, 1929. **It may also be that so much of the depreciation reserve as has not been used for retirements or replacements should be subtracted from the present value of the utility's property in determining the rate base, on the theory that the amounts thus contributed by the public represent a part payment for the property consumed or to be consumed in service.** Compare Burns' Anno. Ind. Stat. (1926), vol. 3, Secs. 12693-12696, p. 1245. These matters are not involved in the case at bar and as to them no opinion is expressed." (Bold face ours.)

In *New York Telephone Co.* v. *Prendergast*, 36 Fed. (2) 54, the Court held that the balance in the depreciation reserve should be deducted from reproduction value new to arrive at the rate base on the ground that it was the best evidence on the amount of accrued depreciation.

The Interstate Commerce Commission in its Orders on Depreciation (O.R. I, 320) (1926); 177 I. C. C. 351, at 408 (1931), reaches the same conclusion that the deduction should be made of the balance in the depreciation reserve, in arriving at fair value, although by a different process

of reasoning. The Order of the Interstate Commerce Commission entered November 2, 1926, stated as follows:

> "It is essential to bear in mind, however, that there is an inseparable connection between the straight line method and the principle that accrued depreciation represented by the depreciation reserve must be deducted in ascertaining the rate base value. If any other principle should hereafter be adopted by the courts, a reconsideration of the entire question of depreciation accounting would at once become necessary" (O.R. I, 320).

The subject matter was considered again, and in its final order of July 28, 1931, the same Commission reached the same conclusion on the ground that "the same elements which produce depreciation for accounting purposes likewise produce depreciation for valuation purposes, and they cannot properly be observed and taken into account in one case and at the same time be overlooked and neglected in another" (Depreciation Charges of Telephone Companies, 177 I. C. C. 351 at 408 (1931)).

The principle which Appellants urge in the instant case as the basis for the deduction of the depreciation reserve in respect to property in service has the advantage over the principle of a presumption sought to be invoked in the *New York Telephone* Case and by the Interstate Commerce Commission that depreciation, in fact, has occurred to the extent of the balance in the depreciation reserve; the presumption may be contrary to fact.

The proposed principle is based upon the familiar equitable principle of not permitting the repudiation of a course of conduct which leads to the unjust enrichment of the repudiating party at the expense of the complaining party.

The proposed principle is consistent with the proposition established by this Court's opinion of December 1, 1930, in the instant case, that the parties (or competent governmental or reviewing authority acting for them) may at any time revise the schedule of payments covering the balance of the total capital not yet reimbursed; may at any time take into account the relation of the amount already reimbursed to the total amount of capital to be reimbursed during the entire period of service life to determine the balance yet to be reimbursed during the remaining service life and to determine the rate of future reimbursements on account thereof (*Smith* v. *Illinois Bell Tel. Co.* 282 U. S. 133, at 158-9; but the utility can not be required to use any of the moneys already reimbursed to it to reimburse itself for the balance not yet reimbursed to relieve the subscribers of the obligation to make reimbursement of such balance.

The proposed principle is consistent with *Board v. New York Tel. Co.* (271 U. S. 23),—that case holding merely that the subscribers cannot prevent the utility from electing to treat the installments as part payment and to enjoy all the benefits derived from its election. This Court has never passed on the proposition that the utility having made the election and claiming the benefits thereof, is bound by the legal consequence flowing therefrom in its relation to the subscribers who have made the reimbursement.

The significance of this Court's decision in the *United Railways* Case, on the issue now under discussion is the

necessary connection held to exist between the basis of determining depreciation expense charges and the capital accounts. Depreciation charges are held to reimburse capital consumed (*United Railways* Case, *supra,* at 253, 254). It follows that the utility cannot receive more than one return from the same amount of capital. This double return can be avoided in one of two ways: either it continues to receive a return on the original investment, represented by the capital account, in which case it makes available for reimbursement the income from the additions provided for through the depreciation reserve, or at its election it retains the latter income and gives up its right to receive a return on the percentage of rate base property represented by the ratio of the balance of the depreciation reserve account to the original cost of the property as shown on its books. It cannot claim both.

From this it follows that the effect of the principle involved is the same whether the property investment is valued at book cost or reproduction cost new.

C.

Appellee's method of computing the reproduction cost new of its property to arrive at the rate base on which it is entitled to a return requires that it should be reduced by the percentage thereof equal to the percentage which the amount of Appellee's depreciation reserve was of the undepreciated book cost of such property as of the same date.

Assume in the example given above (*supra,* 366) that at the end of five years, one-half of the $1,200,000, or $600,000, had been recovered through the depreciation expense charges and had been invested in additions to plant. As-

sume that the reproduction cost new estimate represents a 25% increase over book cost, due to increased labor and material costs, to theoretical overheads in excess of those incurred in actual construction and to the inclusion of Going Value as a part thereof. The reproduction cost new estimate of the original investment would then become $1,500,000 and of the additions $750,000, or a total of $2,250,000. If only $600,000 were deducted, the rate base would become $1,650,000. But obviously all that Appellee would be entitled to earn would be a return on one-half of the original investment, or $600,000 appreciated by 25%, or a total of $750,000, plus a return on the $600,000 additions appreciated by 25%, or a total of $750,000, making a rate base of $1,500,000 and not $1,650,000. The consideration that for accounting convenience Appellee does not credit against the recorded capital account currently with each reimbursement*, and that Appellee's computations to produce its reproduction cost new estimate make use of the original cost figures of plant, as shown in the recorded capital accounts, should not be made the device to unjustly enrich Appellee's investors at the expense of its subscribers.

D.

The District Court's finding on the per cent of the reproduction cost new which should be deducted in arriving at the fair rate base value is a compromise fiat and has no support either in law or in fact.

Appellee's presentation was on the basis that the deterioration in condition of the property in service from a

*Western, which also used the straight line method of computing Depreciation Expense Charges, deducted the amount of the depreciation reserve account from its recorded book cost of property on its balance sheets of the years prior to 1914 (R. VIII, 4513-17).

perfect condition as new property determines the amount to be deducted therefrom for rate-making purposes. On that basis:

1. *Manual central office equipment scheduled for retirement in* 1931-1932 *was valued at not less than* 86% *of spot reproduction cost new on December* 31, 1930.

For depreciation expense computations, Appellee determined that the service life of manual central office equipment was thirteen years and the estimated salvage 10%, resulting in a depreciation rate of 6.9% per year, including the last year of service life for each unit of central office equipment (R. IV, 2863).

For depreciation in valuation computations, Appellee dealt with the manual central office equipment of six offices which were scheduled for retirement in 1931 and 1932, as follows:

Name of Office (1)	Book Cost December 31, 1930 (R. VII, 4084-5) (2)	Year of Initial Installation (R. IV, 2866a) (3)	Estimated Year of Retirement (R. IV, 2866a) (4)	Per Cent of Value New at Which Appellee Included the Property in Rate Base (R. V, 3606-7) (5)	Salvage Actually Realized Upon Retirement (R. V, 3143) (6)
Dearborn	$1,259,779	1921	1-31-1931 (a)	94.21%	(b)
Delaware	441,408	1900	1931	89.67	5.3%
Tandem	328,303	(b)	1931 (c)	86.81	1.0
Canal	699,017	1902	1932	91.03	(b)
Monroe	861,100	1899	1932	92.34	(b)
West	723,478	1901	1932	90.87	(b)
Average Actual Salvage Realized upon Retirement of eight central offices from Jan. 1, 1919 to Jan. 1, 1932 (R. V, 3143)					13.6%

(a) Actual date.
(b) Data not in record.
(c) R. V, 3143.

The inspection of the above six offices was made in the spring of 1931 (R. I, 76). In the case of the Dearborn office the inspection was not completed until February 21, 1931 (R. I, 136), subsequent to the retirement date of the office (R. I, 138).

Appellee's instructions to its inspectors reveal the scope of the inquiry covered by their work, as follows:

> "These instructions are intended to cover the inspection of manual central office telephone equipment for the purpose of listing observable defects in the various kinds of equipment so that a comparison can be made of the condition of the existing equipment with similar new equipment (R. V, 3607-8).

Obviously neither a purchaser of the property nor Appellee as the reproducer of the property would pay 94.21% of $1,259,779 or $1,184,193 for the Dearborn equipment in 1930 with full knowledge that within a few weeks or months thereafter its entire earning power would be destroyed.

2. *Manual central office buildings scheduled for retirement in* 1931-1932 *were valued at not less than* 75% *of reproduction cost new on December* 31, 1930.

For depreciation expense computations Appellee determined that the service life of manual central office buildings was 25 years and the estimated salvage 20%, resulting in a depreciation rate of 3.2% per year, effective January 1, 1932, including the last year of service life.

The following is a complete list of buildings, actually retired in 1931, or estimated by Appellee to be retired in 1932, showing the per cent of valuation new claimed for them by Appellee in its valuation computations as of December 31, 1930, and the per cent of salvage which Appellee, in its depreciation expense computations, estimated would be received upon the retirement of said buildings:

Name of Building (1)	Book Cost as of December 31, 1930 (2)	Year of Initial Construction (R IV, 2866a) (3)	Estimated Year of Retirement (R. IV, 2866a) (4)	Per Cent of Value New Claimed by Appellee for Valuation purposes Dec. 31, 1930 (R. VII, 4086-7) (5)	Salvage Estimated by Appellee's Witness on Depreciation Expense Computations (R. IV, 2866a) (6)
Delaware	$ 68,421	1900	1931	85.57%	55.9%
Canal	117,971	1902	1932	89.56	32.3
Main	452,967	1888	1932	75.78	0
Monroe	174,508	1899	1932	90.38	14.5
Morrell Pk.	58,228	1897	1932	77.51	25.9
Toll	530,286	1908	1932	83.05	0
West	199,548	1900	1932	85.97	11.1

3. 1927 *Model Lincoln automobile was valued on December* 31, 1930, *at* 82% *of original cost new.*

On December 31, 1930, Appellee was the owner of a 1927 model Lincoln automobile purchased in 1927 at a cost of $5,862.60. Appellee's depreciation rates applicable to this car were 24% during 1928 and 1929, and 21% during 1930 (R. II, 1735). The rate for 1928 and 1929 was predicated upon a life of three and one-half years and a salvage of 15%, and the rate for 1930 was predicated upon a life of four years and a salvage of 15% (R. IV, 2853-4). By December 31, 1930, this Lincoln car had run 23,836 miles (R. II, 1735). Appellee's inspector determined that this automobile on December 31, 1930, was in an 82% condition. Such determination was made by computing the ratio between the 23,836 miles which the car had already run up to December 31, 1930, and 150,000 miles which he determined would be the maximum mileage for the usefulness of this car. On the basis of this determination the present value of the 1927 Lincoln car would be $4,807.33; the inspector admitted that the market value as of December 31, 1930, of a 1927 Model Lincoln car was probably $775 (R. I, 165).

Appellee's rate base included the 1927 Model of Lincoln automobile at a value of $4,807.33—82% of the original

cost—in the face of the fact that the market value of that car was approximately $775 (R. I, 165; R. II, 1735).

Per cent condition determined by inspection has probative value (a) to determine the extent to which property maintenance has been neglected and efficiency of operation impaired, (b) to determine the loss in service capacity in the case of items of property whose service lives are limited by wear and tear or the action of the elements, and (c) realized obsolescence apparent at the time of inspection (Interstate Commerce Commission Order, 177 I. C. C. 351, at 398-99, 401, 402). But such per cent condition excludes from consideration obsolescence and inadequacy resulting from age, changes in the art, public requirements * * * casualties, changes in public demand, and losses from destruction of property by extraordinary casualties (O.R. IV, 1191; *Chesapeake & Potomac Tel. Co. v. Whitman,* 3 Fed. (2d) 938, 943).

Such per cent condition, even if it reflected the operation of all causes of property retirement, would not measure the depreciation in valuation to be deducted for rate-making purposes. By viewing the property consumption as of the date of valuation, Appellee assumes that all of the consumption for which it has been reimbursed up to that date occurred prior to the date of valuation. In establishing the annual charges, however, from which the reimbursements to that date were accumulated, Appellee established the period of consumption as the total service life of the property and apportioned the total consumption over the entire period in equal average installments (*infra,* 383). These installments, as already noted, need not correspond to the actual consumption which in fact had taken place up to the date of valuation (*supra,* 367). The conclusion by Appellee that the consumption which in fact took place up to the date of

valuation corresponds exactly to the average consumption based upon the percentage of total consumption, is a guess.

A repudiation of the basis on which the depreciation expense charge is established will result if the scope of the causes of retirement is narrowed in determining depreciation in valuation, and/or if the period during which the causes of retirement are expected to operate to produce the property consumption covered by the depreciation in valuation is limited to the period ending at the date of valuation.

3. The *McCardle* Case does not justify Appellee's presentation. In that case this Court held, on the basis of the facts as presented, that:

> "Mr. Elmes testified that he made an inspection and estimate of all the actual depreciation. He estimated $443,044 would be required to restore the property as of appraisal date to its condition when first installed and put in practical operation. He deducted that amount. The testimony of competent valuation engineers who examined the property and made estimates in respect of its condition is to be preferred to mere calculations based on averages and assumed probabilities. The deduction made in the city's estimate cannot be approved" (*McCardle* Case, 272 U. S. 400, 416).

(a) Obviously if a utility has property whose service lives are limited by wear and tear, or the action of the elements, the inspection method is proper and may be the only method to determine the amount of depreciation in valuation. The Bell System claims that in the telephone industry only a small portion of the property used in the public service is of the character whose service lives are limited by wear and tear or the action of the elements (*Depreciation Charges of Telephone Companies,* 177 I. C. C. 351 at 401; O.R. II, 888-9). The inspection method of determin-

ing depreciation in valuation, proper in one case, will necessarily not be proper in the other.

(b) The annual charges to operating expense to cover depreciation were not determined in the *McCardle* Case by the straight line method, but were based on Retirement Expense, as provided by the Accounting Rules for water utilities (Record, *McCardle* v. *Indianapolis Water Co.*, 272 U. S. 400; *Brief of Appellee*, p. 128). The retirement expense method provides for only the current retirements except that to a small extent some provision may be made for certain large units of property. Under this method the utility is not reimbursed for the consumption of property until it is finally retired (O.R. I, 266).

Appellee's presentation is fatally defective. The only other evidence in the record upon which the District Court could make a valid finding on depreciation in valuation was the depreciation reserve account on Appellee's books and the adjustments thereto which would have resulted had the depreciation charges been recorded as found by the District Court. But such facts the District Court did not use.

DEPRECIATION EXPENSE CHARGES.

Preliminary Statement.

What the District Court Did.

The District Court stated that in reaching its conclusions on the subject matter of depreciation expense charges it gave effect to the following classes of evidence:

(1) Appellee's recorded depreciation expense charges;

(2) Appellee's recorded depreciation expense charges made applicable to the reproduction cost new of its property;

(3) The experience of other Bell System operating companies in respect to depreciation expense charges; and

(4) The 1920 and 1923 Orders on depreciation expense charges and to such charges made applicable to the reproduction cost new of its property (R. III, 2513).

The District Court found as proper annual depreciation allowances which represented a compromise between the claims of the parties, from which findings all parties appealed and to which they assigned error (R. III, 2541-49; R. IX, 4967).

The annual depreciation allowances found by the District Court for each of the years 1923 to 1931, inclusive, were from 14% to 33% less or from $1,149,000 to $2,132,000 less than Appellee's corresponding claims for each year, on the basis of the reproduction cost new estimate of its depreciable property, aggregating for the period $14,634,269. They were from 5% to 9% less or from $220,000 to $733,000

less than Appellee's corresponding book figures for each year based on the original cost of said property, aggregating for the period $3,634,976. But such annual allowances were from 21% to 50% more or from $1,116,000 to $1,572,000 more than the corresponding yearly allowances prescribed by the 1920 Order, aggregating for the period $11,925,805. They were from 36% to 97% more or from $1,200,000 to $3,450,000 more than the corresponding yearly allowances by the 1923 Order, aggregating for the period $20,678,874 (Appendix, p. 95).

Appellants' position is that: the 1920 Order on depreciation expense charges determined the amounts thereof to be deducted as proper operating expense in determining the net income under the existing rates and the 1923 Order on depreciation expense charges determined the amounts thereof in respect to the attacked rates. In support of their position Appellants offer the following:

SUMMARY STATEMENT OF APPELLANTS' CONTENTIONS.

I. The District Court disregarded the evidentiary value of and the legal consequence to be attached to the Commission's 1920 Order on depreciation expense charges as a valid legislative act, in determining the net income produced by the telephone rates prescribed by that Order.

A. The State of Illinois, by statute in 1914, exercised its prerogative to compel Appellee to accept the State's judgment when expressed by the Commission as to the amount of depreciation expense charges on intrastate telephone property to be covered by its telephone rates for intrastate telephone service.

B. No legislative act of the State of Illinois, and no judicial determination since January 1, 1921, has destroyed or modified the binding force of the 1920 Order on depreciation expense charges in the determination of the net income produced by the telephone rates prescribed by that Order.

C. On the present pleadings and record no ground exists to hold void the 1920 Order on depreciation expense charges.

D. The District Court substituted itself for the Illinois Commission as the administrative tribunal.

II. The District Court disregarded the evidentiary value of and the legal consequences to be attached to the 1923 Order on depreciation expense charges as a legislative act in determining the net income estimated to be produced by the telephone rates prescribed by that Order.

III. The District Court could not make a valid finding on depreciation expense charges on the basis of the recorded depreciation expense charges.

A. Appellee is not constitutionally entitled to recover advance reimbursement for anticipated consumption in service of future additions to buildings and central office equipment contemplated to be acquired and to be placed in the service from time to time to 1974.

B. Appellee's use of the straight line method of computing the advance contributions is in violation of law.

C. Appellee's financial program to provide advance contributions produces the fantastic result of making its telephone customers involuntary investors who provide a large portion of its current capital in service without their right of interest therein.

D. Appellee's financial program to provide the advance contributions is based on and gives effect to arbitrary assumptions.

E. Appellee's justification for its financial program to provide advance contributions is based on and gives effect to arbitrary assumptions.

IV. The District Court could not make a valid finding on depreciation expense charges on the basis of Appellee's showing of its recorded depreciation expense charges adjusted "to make the amounts of such allowances correspond with the present value of the property at the time such amounts were set up on the books of the company."

A. Appellee's financial program to provide annual advance contributions for anticipated depreciation on contemplated future additions to buildings and central office equipment precludes the possibility of using the reproduction value of property in service as a base for the computation of the amounts thereof.

B. The investors in Bell Telephone securities "are not primarily interested in property, as such, but are interested in safeguarding the money invested in the property which so far as it will some day be lost in operations, is, therefore, what should be covered by the depreciation provision."

C. The present record precludes the possibility of reaching the same conclusion of fact as that to which this Court attached legal consequences in the *United Railways* Case (280 U. S. 234), to-wit: the conclusion of fact that the cost of retired property at the time of replacement "is for all practical purposes present value."

D. The base which Appellee used in its depreciation expense computations was not the "present value" of the

property which this Court in the *United Railways* Case held was the proper base for depreciation expense computations in respect to the property covered thereby.

E. Appellee's position before the District Court in 1932 repudiates the position which it took in the 1929 hearings in this case, in the regular course of its business in relation to its investors, and before the Interstate Commerce Commission since the decision in the *United Railways* Case.

V. The District Court could not make a valid finding on depreciation expense charges on the basis of the experience of other Associated Companies in respect to depreciation expense charges as disclosed in the record.

VI. The District Court could not make a valid finding on depreciation expense charges on the basis of the 1920 and 1923 Orders on depreciation, made applicable to the reproduction cost new of Appellee's property.

VII. On the basis of the District Court's findings on depreciation expense charges, it is impossible to determine the extent to which they are based on any one or more of the classes of evidence to which it claimed it gave consideration.

DISCUSSION AS TO CONTENTION NUMBERED I.

I.

THE DISTRICT COURT DISREGARDED THE EVIDENTIARY VALUE OF AND THE LEGAL CONSEQUENCE TO BE ATTACHED TO THE COMMISSION'S 1920 ORDER ON DEPRECIATION EXPENSE CHARGES AS A VALID LEGISLATIVE ACT, IN DETERMINING THE NET INCOME PRODUCED BY THE TELEPHONE RATES PRESCRIBED BY THAT ORDER.

The District Court made no specific finding that the 1920 Order on depreciation expense charges was void. Its findings on depreciation expense charges to be covered by the existing telephone service charges prescribed by the 1920 Order clearly indicate that it exercised its own independent judgment on that subject matter on new evidence, and arrived at a result which was different than that found by the Commission. Such action was clearly in violation of law.

A.

The State of Illinois, by statute in 1914, exercised its prerogative to compel Appellee to accept the State's judgment when expressed by the Commission as to the amount of depreciation expense charges on intrastate telephone property to be covered by its telephone rates for intrastate telephone service.

Appellee uses the straight line method of determining depreciation expense charges. By the use of this

method it is reimbursed, through its telephone rates, by each installment, an equal number of dollars, which amount represents an equal portion of the total depreciation expense of property in service, which, as has been determined, will be consumed within the period covered by all the installments. But that method does not, *per se,* determine whose judgment—Appellee's or the State's—shall fix, with finality (in the absence of abuse) how many dollars of reimbursement shall be recovered and what portion thereof shall be included in each such annual installment. Nor is such determination had by any requirement imposed on Appellee to properly record the amount of depreciation expense charges in its accounting records. (*Havre de Grace & Perryville Bridge Co.* v. *Towers,* 132 Md. 16, 22-23, 103 Atl. 319, 321 (1918).) Nor is such determination had by the consideration that the Commission, as an incident of rate-making which is a legislative function, must give some consideration to the item of depreciation expense charge as a charge against gross income. (*Knoxville* v. *Knoxville Water Co.,* 212 U. S. 1 (1909); *United Railways & Elec. Co.* v. *West,* 280 U. S. 234 (1930).)

The District Court, in deciding whether the rates for telephone service fixed by the Commission are confiscatory, must determine for itself, upon offered evidence, what sum would be earned by it, (*Ohio Valley Water Co.* v. *Ben Avon Borough,* 253 U. S. 287 (1920)), and, as an incident thereof, must determine for itself what the depreciation expense charges would be (*Missouri ex rel. S. W. Bell Tel. Co.* v. *Public Service Comm.,* 262 U. S. 276, 291 (1923)). But such determination does not *per se* determine the evidentiary value to be attached to the Commission's Order on depreciation expense charges.

There is now no legal doubt about the prerogative of the State to compel a utility, subject to its jurisdiction, to accept that State's judgment, expressed by a Commission or other administrative tribunal, on the amount of depreciation expense charges to be covered by such utility's rates for service, if the State chooses so to do. (*Smith* Case, 282 U. S. 133.)* However, the exercise by the State of its prerogative must be indicated by express statutory declaration and cannot be inferred from the exercise by the State of its prerogative to compel the utility to accept the State's judgment, as expressed by a Commission, on the character of accounting records in which the utility is compelled to record all expense items or to record depreciation expense charges specifically, when properly determined, or to compel the utility to accept the State's judgment, as expressed by a Commission, on the rates for service to be charged by the utility. (*Havre de Grace & Perryville Bridge Co.* v. *Towers, supra*, 384).

Section 14 of the State Public Utilities Commission Act, in force from 1914 to July 1, 1921 (Illinois Laws 1913, *ibid.*, Art. II, Sec. 14, p. 468), and Section 14 of the Illinois Commerce Commission Act in effect thereafter (Laws 1921, *ibid.*, Art. II, Sec. 14, p. 711; O.R. I, 76), provide:

> "The Commission may, from time to time, ascertain and determine, and by order fix, the proper and adequate rate of depreciation of the several classes of property for each public utility; and each public utility shall conform its depreciation accounts to the rates so ascertained, determined and fixed."

*Reasons of economic necessity, supporting the constitutionality of paragraph 5 of Section 20 of the Interstate Commerce Act as amended by the Transportation Act (Act Feb. 28, 1920, C. 91; 41 Stat. 493), obligating interstate carriers to accept Congress' judgment, as expressed by Order of the Interstate Commerce Commission, are fully set forth in the Report of the Interstate Commerce Commission on Depreciation, dated November 2, 1926, 118 I. C. C. 295, reproduced as Comm. Ex. 27 (O.R. I, 282-292).

Similar provision exists in fifteen other States* and in the Transportation Act of 1920** but does not exist in twenty-nine States.*** Of the other States with public utility regulatory laws, one creates limited authority in its Commission,[1] and the other two create no authority in their Commission[2] over depreciation expense charges.

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*Arizona, California, Colorado, Idaho, Indiana, Minnesota, Missouri, New Hampshire, New Jersey, Ohio, Oregon, Pennsylvania, Tennessee, Utah, Wisconsin (Appendix, 97-115).

**By paragraph 5 of Section 20 of the Interstate Commerce Act, as amended by Transportation Act of 1920 (41 Stat. 493, Act Feb. 28, 1920, C. 91), Congress (a) obligates the Interstate Commerce Commission to originate depreciation charges on interstate property and to make changes therein; and (b) obligates the utility to conform its depreciation charges to the amount, as fixed (O.R. I, 263-4). This obligation is in addition to and distinct from the obligation imposed on the Commission to prescribe a general system of accounts (Hepburn Act, June 29, 1906, C. 3591, Sec. 7, 34 Stat. 594, as amended Act, February 28, 1920, C. 91, 41 Stat. 493), and to originate and change rates and other charges for services to be rendered by interstate carriers (Sec. 15 (1) of Interstate Commerce Act, as amended by Transportation Act, February 28, 1920, C. 91, Sec. 418 (1), 41 Stat. 484).

***Arkansas, Connecticut, Delaware, Florida, Georgia, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Mississippi, Montana, Nevada, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Rhode Island, South Carolina, South Dakota, Texas, Vermont, Virginia, Washington, West Virginia, Wyoming. Since the record closed, the state of Washington enacted a statute on March 3, 1933, effective March 18, 1933, which contains a provision similar to that which exists in Illinois respecting depreciation expense charges (Laws of Washington, 1933, pp. 611-12).

In Fourteen of these States, statutory enactment has granted power to regulatory body to prescribe a system of accounts to be kept by utilities: Georgia—Parks Ann. Code, 1914, Sec. 2663; Iowa—Code, 1924, Sec. 7319 (Electric Companies); Maine—Rev. Stat., 1916, C. 55, Sec. 19; Maryland—Ann. Code (Bagby), 1924, Art. 23, Sec. 387; Michigan—Compiled Laws, 1915, Sec. 4847 (Electric Companies); Montana—Rev. Code, 1921, Sec. 3885; Nevada—Rev. Laws, 1922, Sec. 18, p. 3157; New York—McKinney's Consol. Laws, 1926, Supp. Book 47, Sec. 66 (Gas and Electric Companies); North Dakota—Comp. Laws, 1913, C. 11, Sec. 4609; Rhode Island—Gen. Laws, 1923; South Carolina—Code of 1922, No. 525; Washington—Remington's Comp. Stat., 1922, Sec. 10416; West Virginia—Barnes' Code, 1923, C. 150, Sec. 26; Wyoming—Comp Stat. 1920, Secs. 5467, 5496. In one of these states (Kansas—Rev. Stat. 1923, Secs. 66-122), statutory enactment has granted power to a regulatory body to prescribe accounting records to record depreciation expense charges, when determined. In twenty-one of these states, statutory enactment has granted power to a regulatory body to approve or revise the rates and other charges made by a utility for service to be rendered to the public and/or to originate and/or change rates and other charges for such services: Arkansas—Crawford & Moses Sess. Laws, 1921-1923, Act 124, Sec. 17; Connecticut—Gen. Stat., 1918, Sec. 3735, Laws 1920-1921, C. 3280; Georgia—Acts 1878-1879, Title 12, Sec. VI; Kansas—1923 Rev. Stat., Secs.

The power in the Commission to originate the amount of depreciation expense charges and to make changes therein and to require the utility to conform its depreciation expense charges to the amount so fixed, is in addition to and distinct from the power granted by the Illinois State Legislature to the Commission—

(1) "to require all public utilities to keep such accounts as will adequately reflect depreciation, obsolescence and the progress of the arts" (Illinois Laws 1913, *ibid.*, Art. II, Sec. 14, p. 468) and

(2) "to establish a uniform system of accounts to be kept by public utilities" which system, when established by the Commission, must be kept by the utilities under its jurisdiction (Laws 1913, *ibid.*, Art. II, Sec. 13, p. 468);

66-108, 66-110, 66-117; Louisiana—Marr's Ann. Rev. Stat. Supp. 1926, pp. 1275-1276 (Commission Council of City of New Orleans); Maine—Rev. Stat. 1916, C. 55, Secs. 25, 46, Laws 1923, C. 31, Secs. 43, 45, 48; Maryland—Ann. Code (Bagby) 1924, Art. 23, Secs. 387, 396; Michigan—Acts 1923, p. 150 (Electric Companies); Montana—Rev. Code 1921, Secs. 3897-3899; Nevada—Rev. Laws 1922, p. 3159; New Mexico—Laws 1921, C. 94; New York—McKinney's Consol. Laws 1926 Supp., Book 47, Secs. 65, 66 (Gas and Electric Companies); North Carolina—Consol. Stat. 1919, Sec. 1066; North Dakota—Comp. Laws 1913, Sec. 4609, Chaps. 4, 12; Oklahoma—Comp. Laws 1921, Sec. 3463; Rhode Island—Gen. Laws 1923, Secs. 3681-3700; South Carolina—Code of 1922, p. 1786; Vermont—Gen. Laws 1917, Sec. 5061 (IV), 5066; Virginia—Code of 1924, Sec. 4071; Washington—Remington's Comp. Stat. 1922, Sec. 10390 (Gas, Electric and Water Companies); Wyoming—Comp. Stat. 1920, Sec. 5472.

1. Massachusetts requires the utility to set up depreciation expense charges on intrastate property, subject to revision by the regulatory body only if such charges are not sufficient (Appendix, p. 102). The same power is conferred upon the regulatory body in Massachusetts as is conferred in Illinois covering depreciation accounting records, general systems of account, and rates for services to be rendered by the utility to the public (Mass. Gen. Laws 1921, C. 164, Sec. 81 (Accounts); id., Sec. 93 (rates).)

2. In Alabama (by statutory enactment) and Nebraska (by constitutional provision), the public utility is required to set up depreciation expense charges on intrastate property, but neither authority nor obligation is created in any regulatory body to approve or to revise the managerial act of the utility in fixing or changing the amount of depreciation expense charges, or to originate the amount or to make any change therein and to require the utility to conform its depreciation expense charges to any allowance fixed by such regulatory body (Appendix, pp. 97). In Alabama the same power is conferred on the regulatory body as is conferred in Illinois covering depreciation accounting records, general systems of account and rates for services to be rendered by the utility to the public (Ala. Code 1923, Secs. 9786-9788 (accounts); id., Secs. 9763, 9764, 7035, 9770 (rates)). In Nebraska there are no such statutory provisions covering these subject matters.

(3) "'to approve the rates or other charges originated by the utility for service to be rendered the public or to fix rates or other charges in excess of or less than those originated by the utility itself'' (Laws 1913, *ibid.*, Art. IV, Sec. 33, pp. 476-477; Laws 1921, *ibid.*, Art. IV, Sec. 33, p. 720; R. I, 87).

B.

No legislative act of the State of Illinois, and no judicial determination since January 1, 1921, has destroyed or modified the binding force of the 1920 order on depreciation expense charges in the determination of the net income produced by the telephone rates prescribed by that order.

Since the Commission's Order of 1920—no order has been made by it affecting the telephone rates and depreciation expense charges for Chicago intrastate service and Chicago intrastate property other than the order of 1923. The 1923 Order contained the Commission's expression of the State's judgment on depreciation expense charges.

This later judgment would have superseded the State's judgment on depreciation expense charges, as expressed in the 1920 Order, had the 1923 Order ever been put into effect. But the telephone rates prescribed by the 1923 Order were enjoined by the District Court and have never been in force. Whether or not the portion of the 1923 Order, on depreciation expense charges, is in force (not having been specifically enjoined), so as to supersede the 1920 Order on depreciation expense charges, need not now be considered. We need not consider whether the later order should be used in determining the net income produced after 1923 by the telephone rates prescribed by the 1920 Order. The 1923 Order prescribed depreciation expense charges which were

less in amount each year than those prescribed by the 1920 Order (Appendix, p. 95).

Any contention that even though enjoined, the circumstance that the Commission in 1923 attempted to express a new judgment on depreciation expense charges destroyed the 1920 judgment would lead to the absurd result of leaving no State judgment in force in spite of the clear intent of the State to have Appellee follow the State's judgment on depreciation expense charges.

Nor need we consider at this point whether the annual depreciation allowance fixed by the 1920 Order is the maximum which Appellee could include as its depreciation expense charge in each of the years 1923-1932, inclusive, in determining whether the depreciation allowance fixed by the 1923 Order was constitutionally adequate, or in determining the amount properly to be charged against gross income, in the event that the District Court had held the annual allowance fixed by the 1923 Order was not adequate for any year or years of this period. At this point we are considering only the binding force of the annual allowance fixed by the 1920 Order in the determination of the net income produced by telephone rates prescribed by that same Order.

C.

On the present pleadings and record no ground exists to hold void the 1920 Order on depreciation expense charges.

The pleadings and record show that Appellee has not attacked, in these proceedings, the 1920 Order on depreciation expense charges on the ground that

(1) the telephone rates prescribed by the same 1920 Order are constitutionally inadequate on the basis of Appellee's judgment of the amount of depreciation expense charges to be covered by them—on the contrary, Appellee's court action was to maintain such telephone rates in force; or

(2) the 1920 Order on depreciation expense charges is otherwise confiscatory; or

(3) the proceedings in which the 1920 Order was issued were irregular so as to make void the portion of the Order covering depreciation expense charges; or

(4) the 1920 Order on depreciation expense charges was supported by no evidence or by insufficient evidence.

Appellee, at the hearings leading up to the District Court's decree of February 1, 1930, reversed by this Court on December 1, 1930, justified its failure to conform its depreciation expense charges to the amounts fixed by the Commission's orders by what it conceived the legal situation to be in 1920 and thereafter, resulting from (1) the Act of Congress in 1920, which granted jurisdiction to the Interstate Commerce Commission to prescribe depreciation rates for telephone companies doing an interstate business; (2) the action of the Interstate Commerce Commission in having the subject-matter under consideration even though no final determination had as yet been made; (3) the action of the Interstate Commerce Commission in prescribing its accounting rules to record expenses, including depreciation charges; (4) the action of the Interstate Commerce Commission in directing Appellee and other utilities, engaged in interstate commerce, to observe the requirements of these accounting rules; and (5) the action of the Interstate Commerce Commission in directing these utilities to continue to include in their accounts the amount of depreciа-

tion expense charges which properly should be included therein pending the determination and order by the Interstate Commerce Commission fixing such amounts (O.R. II, 880-885).

This Court's Opinion of December 1, 1930, held against Appellee's position on each proposition. (*Smith* Case, 282 U. S. 133, at 159.)

D.

The District Court substituted itself for the Illinois Commission as the administrative tribunal.

The District Court substituted itself as the administrative tribunal for the Illinois Commission. Neither the statutes of the State of Illinois, nor the Constitution of the United States, nor the Act of Congress under which the District Court is functioning in the instant case, confer on it any such administrative powers.

By its action, the District Court disregarded the fact that the subject matter of depreciation expense charges involves substantial property rights (*United Railways* Case, 280 U. S. 234 (1930)) of a local character and not arising in interstate commerce and disregarded its legal obligation to apply the valid local statutory law dealing therewith in this case wherein the constitutionality of the legislative act, or its enforcement, was not in issue. *Brine* v. *Insurance Co.*, 96 U. S. 627 (1877); *Orvis* v. *Powell*, 98 U. S. 176 (1878); *Case* v. *Kelly*, 133 U. S. 21 (1890); *Missouri, etc. Trust Co.* v. *Krumseig*, 172 U. S. 351 (1899). By its action, the District Court failed to recognize and to give full effect to State action within the scope of its normal field in relation to the domestic concern of operations exclusively intrastate, of utilities subject to its jurisdiction.

(*Railroad Commission* v. *Maxcy*, 281 U. S. 82 (1930); *Smith* v. *Illinois Bell Tel. Co.*, 282 U. S. 133, at 160; *Board* v. *Great Northern Ry. Co.*, 281 U. S. 412, at 421 (1930); *United Fuel Gas Co.* v. *Commission*, 278 U. S. 300 (1929); *Harkin* v. *Brundage*, 276 U. S. 36 (1928).)

DISCUSSION AS TO CONTENTION NUMBERED II.

II.

THE DISTRICT COURT DISREGARDED THE EVIDENTIARY VALUE OF AND THE LEGAL CONSEQUENCES TO BE ATTACHED TO THE 1923 ORDER ON DEPRECIATION EXPENSE CHARGES AS A LEGISLATIVE ACT IN DETERMINING THE NET INCOME ESTIMATED TO BE PRODUCED BY THE TELEPHONE RATES PRESCRIBED BY THAT ORDER.

The District Court made no specific finding that the 1923 Order on depreciation expense charges was void. Its findings on depreciation expense charges to be covered by the attacked telephone service charges prescribed by the 1923 Order clearly indicate that it exercised its own independent judgment on that subject matter on new evidence, and arrived at a result which was different than that found by the Commission. Such action was clearly in violation of law.

On review by a District Court in a confiscation case, of a State Commission's Order on telephone rates in the twenty-nine states (*supra*, 386) where the State has not compelled the utility to accept its judgment on the depreciation allowance as expressed

by a valid Commission Order, the Commission's finding as to the proper depreciation allowance in the same order would be a finding of fact in respect to the managerial discretion of the utility and like any other fact found by the Commission of such nature, would not have any more evidentiary value, if any at all, than findings on any other fact incident to the determination of the telephone rates under attack. (*Ohio Valley Water Company* v. *Ben Avon Borough*, 253 U. S. 287 (1920).)

On review in a similar proceeding of a State Commission's Order on telephone rates in the sixteen states (*supra*, 386), where the Commission has determined the proper depreciation expense charge, pursuant to statutory authority or obligation of the character of Section 14 of the Illinois Commerce Commission Law, the Commission's finding therein as to the proper depreciation expense charges, even though attacked, attains special significance of a legislative direction to the utility to accept the State's judgment within the field of proper legislative action. Such direction cannot be disregarded by the District Court in the absence of the determination by it that such direction by the Commission was not itself a valid direction, or was so arbitrary as to be void.

The specific direction by this Court of December 1, 1930, that the District Court determine the fact of the amount which Appellee may properly charge as depreciation expense charges against gross income produced by the attacked telephone rates did not in any wise change the duty of the District Court in respect to the proper recognition of the legal consequences attaching to and the evidentiary value of the depreciation allowance prescribed by the 1923 Order. Such a direction was a direction to do that which every District Court must do in order "to decide

whether a proposed (telephone) rate is confiscatory" (*Missouri, ex rel, S. W. Bell* v. *Public Service Comm.*, 262 U. S. 276, 291 (1923)), but which action the District Court did not take in the 1930 decree because its conclusion in respect to other issues rendered such action unnecessary. Such direction could not have been intended to effect a change in the scope of power which the District Court had prior to such direction, in determining the subsidiary question: "What the operating expenses and charges which so operating, would be" (*ibid.*, at 291).

On the issue of validity of the 1923 Order on depreciation expense charges, this Court held adversely to the District Court's contention that the Commission could not consider past accumulations in fixing annual depreciation expense allowances. This Court also held adversely to Appellee's contention as to the lack of the power of the State of Illinois to act on the subject matter of depreciation expense charges by holding that until the Interstate Commerce Commission acted, the State could act and that the District Court, in reviewing the State's action, could also act on the subject matter of depreciation expense charges. Such ruling did not, of course, change the scope of the District Court's power. (*Smith* Case, 282 U. S. 133, at 159, 160.)

Nor did this Court change the scope of the power of the District Court by indicating various factors, some of which were of general application and others of which had special application to the unique features of Bell System operation by which the District Court could determine the issue of the claimed errors in the Commission's 1923 Order on depreciation expense charges. (*Smith* Case, *supra*, at 158-160.)

DISCUSSION AS TO CONTENTION NUMBERED III.

III.

THE DISTRICT COURT COULD NOT MAKE A VALID FINDING ON DEPRECIATION EXPENSE CHARGES ON THE BASIS OF THE RECORDED DEPRECIATION EXPENSE CHARGES.

The following discussion shows that the District Court could not make a valid finding on the basis of the classes of evidence to which it claimed it gave consideration (*supra*, 378) either that Appellee had sustained its burden to prove that the State's judgment on the proper annual depreciation expense charges was so arbitrary as to be void, or that disregarding the evidentiary value of the Commission's judgment as a legislative Act, the District Court could find from Appellee's showing the proper annual depreciation allowance.

A.

Appellee is not constitutionally entitled to recover advance reimbursement for anticipated consumption in service of future additions to buildings and central office equipment contemplated to be acquired and to be placed in the service from time to time to 1974.

What Appellee Did.

Appellee admitted that its depreciation rates and expense charges for the period 1923 to 1931, inclusive, included as part thereof annual advance contributions by its telephone users, computed on the straight line method, for anticipated depreciation on contemplated future addi-

tions to buildings and central office equipment (R. II, 1107, 1142).

As illustrative of Appellee's practice, Appellants direct attention to the following experience of Appellee in respect to the

Merrimac Exchange Building.

In 1926 Appellee built the Merrimac Exchange Building as a manual central office at an initial cost of $235,560. From the date of construction to 1929, inclusive, there were added $2,661 in additions and Appellee had retirements of $341, making a net investment in 1929 of $237,880 (R. VI, 3774b). In 1930 Appellee's depreciation expense expert, Mr. Turner, made a study to determine the depreciation expense charges applicable to that building for the year and to be covered by the Chicago Exchange service charges for 1930 (R. II, 1105).

I. Mr. Turner made five assumptions:

(1) He assumed that the ultimate retirement of the building would be in 1984 and that its "over all life"—i. e., the estimated life from the period of the initial construction to the retirement of the actual construction—was fifty-eight years.

(2) He assumed that during the future fifty-five years Appellee would increase its investment in that building by $1,054,000 or 4.4 times its investment at the date of study, through the following contemplated future additions and would have the following contemplated future retirements:

	Contemplated Future Additions.	Contemplated Future Retirements.
1931	$ 152,000	$ 10,000
1944	645,000	75,000
1954	95,000	10,000
1964	100,000	11,000
1974	62,000	9,000
1984	.....	1,176,880
	$1,054,000	$1,291,880
1929 Investment	237,880	
Total Gross Investment	$1,291,880*	

On the basis of this assumption he calculated that the "average life" of the building,—i. e., the weighted average of the estimated life of the initial construction in 1926 plus the estimated life of all the additions to 1974—was 37.9 years (R. VI, 3774b).

*The schedule of equipment for the Merrimac Building was estimated to be (R. VI, 3774a):

Year.	Contemplated Future Additions.	Contemplated Future Retirements.
1930	$ 61,300	$ 400
1931	71,000	3,100
1932	289,300	4,200
1933	109,200	3,500
1934	170,000	700
1935	95,000	200
1936	87,700	200
1937	91,600	300
1938	86,000	400
1939	69,900	200
1940	63,800	200
1941	51,900	100
1942	56,300	500
1943	55,000	300
1944	26,000	1,990,148
	$1,384,000	$2,004,448
1929 Investment	620,448	
Total	$2,004,448	

(3) He assumed that the price level for labor and material in Chicago in 1931, in 1944, in 1954, in 1964 and in 1974 would be the same as the price level for labor and material which prevailed in Chicago during the years 1928-1929 (R. II, 1112).

(4) He assumed that the retirements in the years 1931, 1944, 1954, 1964 and 1974 would bring no salvage whatsoever (R. II, 1431).

(5) He assumed that at the end of its life in 1984 the salvage on that building would be $184,770.

II. Mr. Turner testified:

> "On the principle as I have just stated it, we start in in 1926 to establish a depreciation rate and a depreciation charge against income so that by 1984 we will get back the $235,000 that we put in in 1926, the $3,000 that we put in by 1930, and the approximately one million dollars that we expect to put in at various times in 1931, 1944, 1954, 1964, and 1974. Of course, we are using a rate that will restore the total amounts that I spoke of, but only applying it to the investment we actually have as a measure, in order to get the number of dollars which will enable us to come out whole on $1,176,880 in 1984" (R. II, 1105). "In the case of the Merrimac Building, we would start off in 1926 to accumulate money to reimburse ourselves in 1984 for the depreciation that would accrue on the additions from 1974 to 1984, plus the reimbursement required for interim retirements during the period" (R. II, 1142).

Appellee accomplished this result by employing the "average life" of 37.9 years in determining the uniform depreciation rate to be applied throughout the 58-year-overall life of the building instead of employing actual service life of 58 years in determining the depreciation rate for the initial construction and employing the actual service life

for each addition thereto in determining the depreciation rate for each such addition.

It is, of course, clear that if Appellee establishes a depreciation expense charge for each year of the 37.9 years of the "average life of the Merrimac Exchange building" to return to it at the end of the 58 years its investment in the initial construction which it estimates to have a life of 58 years, the depreciation expense charge for each of the 37.9 years of the "average life" represents one of two things: either a depreciation expense charge on the actual investment in 1926, in which case it is excessive as not being spread over the 58-year period; or it represents a combined expense charge, (a) part of which is a depreciation expense charge to reimburse Appellee at the end of 58 years, for its actual investment made in 1926; and (b) part of which is an advance contribution for the anticipated depreciation on contemplated future additions although the depreciation will in fact begin only at the scheduled date for the placing of such additions in service and continue until the end of the 58-year period when such future additions must be retired with the retirement of the original construction. Appellee conceded that the depreciation expense charge was the combined charge above described (R. II, 1142, *supra*, 398).

The result of Appellee's practice may be illustrated by the following example where only a single *addition* is considered. Assume a building cost $100,000 to construct in 1926. It is expected that after being used for 40 years, it will be increased in size by additional units or by additional stories in 1966 at an estimated further cost of $100,000; at the end of 50 years, 1976, the building is expected to be pulled down. Disregard the matter of salvage. Appellee would

apply a 2% rate to the $100,000 actual investment each year for fifty years from 1926, if only that investment were sought to be recovered in 1976. Appellee, under Mr. Turner's method, would apply a 3⅓% rate* to the same $100,000 actual investment from 1926 to 1966 to recover not only the proportionate part ($80,000) of the depreciation on that actual investment to 1966, but also to provide 1⅓% of $100,000 for forty years, or $53,333.33 of advance contributions for the anticipated depreciation on the contemplated $100,000 addition to be placed in service in 1966 during the period 1966 to 1976. Similarly, during the period 1966 to 1976 the 3⅓% rate applied to the actual investment of $100,000 placed in service in 1926 and to the $100,000 actual investment placed in service in 1966 gives to Appellee reimbursement which, as to the initial investment of $100,000, is more than what it would have been if considered separately during this ten-year period and which, as to the 1966 additional investment is less than what it would have been if considered separately during this ten-year period.

If $25,000 of the original unit should be scheduled for retirement at the date of installing the $100,000 addition forty years hence, Appellee, under Mr. Turner's method, would recover during the forty years not only the proportionate part ($85,000) of the depreciation on the actual investment to 1966 but also $54,130 of advance contributions for the anticipated depreciation on the con-

*The 3⅓% rate is arrived at in the following manner:

	Investment.	Life.	Dollar Years.
Original unit	$100,000	50	$5,000,000
Addition	100,000	10	1,000,000
Total	$200,000		$6,000,000

$6,000,000 ÷ $200,000 = 30 years average life. 100% (investment) minus salvage (none) divided by 30 years equals depreciation rate of 3⅓%.

templated $100,000 addition to be placed in service in 1966.

What Appellee Did Not Do.

(1) Appellee made no provision during the period of the advance contributions:

(a) to assure that the contemplated future property would in fact be acquired and be placed in the future service;

(b) to assure that to the extent that Appellee does not in fact acquire and place in the future service such contemplated future property it will account to its telephone users for the amount of the advance contributions and the earnings thereon (R. II, 1192).

(2) Appellee computed the annual advance contributions on the straight line method without taking into account the earnings which such contributions would earn to the date when the contemplated future additions would in fact be placed in the service and thereafter to the date when Appellee would under the law become entitled to such contributions as reimbursement for consumption in service and the earnings thereon applicable thereto (R. II, 1104, 1191).

Appellee's Justification for What It Did.

Appellee justified the depreciation treatment of buildings and central office equipment on the ground that:

(1) a single building or a single central office plus the contemplated future additions thereto in each case constitute a "group" of units; the group basis of depreciation treatment of such units as applied by Appellee corresponds

to the "group" basis of depreciation treatment of *units in service* such as poles, which the accounting rules of the Interstate Commerce Commission requires *to be applied to plant in service* (R. II, 1140, 1141);

(2) Appellee's depreciation treatment of buildings and central office equipment is an integral part of its depreciation treatment of all of its depreciable property; the net effect of the entire scheme is more favorable to its subscribers for the period 1923 to 1931, inclusive, than if Appellee had revised for that period its depreciation treatment of all of its depreciable property and as part of such revised treatment had considered only the buildings and central office equipment in service without giving effect to possible future additions thereto.

(3) Appellee's depreciation treatment of buildings and central office equipment benefits the subscribers in the earlier years of the life of the property, in that the depreciation expense charges applicable to such period are lowered to the extent that the retirement date is deferred through the plan of providing against inadequacy by contemplated future additions; and the subscribers of the later years are likewise benefited by the same plan to the extent that the portion of the depreciation expense charges applicable to the period subsequent to the date when the additions would go into service has been reimbursed in the period prior to such installation.

Appellee's Justification for What It Did Not Do.

Appellee offered no justification for its collection of the advance contributions and the earnings thereon without making provision as above stated for the assurance of their proper use or return.

Appellee justified the use of the straight line method of computing the advance contributions on the ground that such contributions were for the same purpose as the depreciation expense charges covering reimbursement for consumption in service of capital *actually employed therein,* which latter charges are required by the Interstate Commerce Commission accounting rules to be computed by the straight line method. But Appellee offered no justification for the retention of the earnings without accounting therefor prior to the date when Appellee would be entitled to retain the same as reimbursement for consumption in service of the capital *actually* employed therein.

AMOUNT OF ADVANCE CONTRIBUTIONS INCLUDED IN APPELLEE'S RECORDED DEPRECIATION EXPENSE CHARGES.

The undepreciated book investment in service in buildings and central office equipment ranged from $36,800,000 in 1923 to $74,700,000 in 1931, representing from 40% to 42% of the total depreciable property in service (Appendix, p. 96).

The depreciation expense charges on buildings and central office equipment, ranging from $2,200,000 to $4,400,000 per year, represent from 47% to 50% of the total recorded depreciation expense charges; are three times the amount by which the 1923 Order decreased the depreciation allowance fixed by the 1920 Order; are 70% more than the amounts by which the depreciation allowances of the 1920 Order were lower than Appellee's recorded depreciation expense charges; and are 10% more than the amounts by which the depreciation allowance of

the 1923 Order were lower than Appellee's recorded depreciation expense charges in the years 1923 to 1931, inclusive (Appendix, p. 96).

Appellee did not show the portion of the recorded depreciation expense charges on buildings and central office equipment represented by advance contributions. Nor can such portion be determined with accuracy from the available data in the record. That it was substantial appears from the following facts:

Prior to 1928 Appellee did not make any detailed program setting forth the dates and amount of contemplated additions and retirements to the final retirement date of the original installation (R. II, 1114). Prior to 1928 effect was given to contemplated future additions, based purely on the judgment of Appellee's employee who set up the current depreciation rates and charges (R. II, 1115, 1107).

How much such advance contributions increased the depreciation rates and charges on buildings and central office equipment for the period 1923 to 1927, inclusive, the record does not show, nor is it possible to determine. Appellee refused to produce its President, who was in charge of the depreciation expense work for Appellee during the years 1923 to 1927, inclusive, to explain the basis of the depreciation rates and charges which he set up for these years. Appellee claimed that he was not available for that purpose (R. II, 1119); although he was available and was produced as Appellee's witness at the final hearings on other phases of its case (R. I, 388). Appellee offered, over Appellants' objections, the depreciation exhibits A-125-129 (R. IV, 2853-85) covering the years 1923 to 1927, through another witness, who admitted he did not know the

basis upon which they were established for these years (R. II, 1116).

Beginning with 1930, Appellee made specific estimates of contemplated future dates of contemplated future additions and contemplated future retirements to and of *Manual Central office* buildings and to and of *Manual Central office* equipment and specific estimates of the amount of such contemplated future additions and retirements (R. II, 1115), in manner similar to that illustrated above (*supra*, 396). But no detailed estimates were made by it in respect to contemplated additions to *Dial Central* office buildings and to *Dial Central* office equipment, although in each of the cases advance contributions were included as part of the depreciation rates in respect to such property (R. II, 1115).

How much such advance contributions increased the depreciation rates or expense charges on dial central office equipment and buildings the record does not show, nor is it possible to determine.

The undepreciated book investment in Manual Central office buildings on December 31, 1929, was $5,775,086. As of that date Appellee contemplated future additions thereto to be placed in service from 1931 to 1974 in the aggregate amount of $5,995,000, all to be retired by 1984 (R. VII, 4081).

The undepreciated book investment in Manual Central office equipment as of December 31, 1929, was $31,081,262. As of that date Appellee contemplated future additions thereto to be placed in service from 1930 to 1944 in the aggregate amount of $11,563,000, all to be retired by 1944 (R. VII, 4081).

Appellee's final depreciation expense charges established after 1928 were the result of the application of judgment

to the results of the computations making use of this detailed program of future additions and retirements (R. II, 1123). It is therefore impossible to determine by mathematical calculations alone, even on the basis of the detailed program used in respect to Manual Central office buildings and Manual Central office equipment, what portion of the current depreciation rate and charges in respect to such items is represented by the depreciation expense charges on property in service and what portion by the advance contributions for anticipated depreciation on contemplated future additions.

Issue Presented.

The issue presented on the record is the constitutional right* of Appellee to recover through its telephone service charges during the period under investigation annual advance contributions as advance reimbursement for the anticipated depreciation on property contemplated to be acquired in the future and to be placed in the service to 1974 under the following special conditions:

(a) where the acquisition and placing of the contemplated future property in the future service is within the sole and uncontrolled discretion and power of Appellee;

(b) where no provision whatsoever has been made at the date of such annual advance contributions to assure that such contemplated future property will in fact be acquired and placed in the future service (R. II, 1190); and

(c) where no provision whatsoever has been made at the date of such annual advance contributions to assure that to the extent that Appellee does not in fact acquire and place in the future service such contemplated future

*Whether the Commission, in its discretion could permit such advance contributions and on what terms, is not in issue here.

property it will account to its telephone users for the amount of such annual advance contributions and for the earnings thereon applicable thereto.

Such advance contributions have no relation to *any property of Appellee in service or to property which Appellee is obligated to place in service.* There is no relation between Appellee's expense charges to cover these annual advance contributions and the expense charge which this Court sustained in *United Railways* Case:

> "One of the items of expense to be ascertained and deducted is the amount necessary to *restore property* worn out or impaired so as to continually maintain it as nearly as practical at the same level of efficiency for the public service. The amount set aside periodically for this purpose is the so-called depreciation allowance" (*United Ry. and Elect. Co. of Baltimore* v. *West*, 280 U. S. 234, 253),

or the expense charge which this Court sanctioned in the *Knoxville* Case, wherein it held that the utility

> "is entitled to see that from earnings the value of the property *invested* is kept unimpaired, so that at the end of any given term of years the original investment remains as it was at the beginning (*Knoxville* v. *Knoxville Water Co.*, 212 U. S. 1, 13),"

or the expense charge which the Bell System defined as the "depreciation expense charge" before the Interstate Commerce Commission in the hearings on "Depreciation Charges of Telephone Companies":

> "It is the using up of the property that constitutes the expense, the money measure of which for the entire period of the service life is the number of dollars of cost of the property, less the net salvage dollars. It is *essentially the same in this respect as if the company had on hand on January 1, twelve hundred tons of coal that it had bought and paid for at ten dollars a ton, and would use up during the year*

> *one hundred tons a month.* The expense for coal will be one thousand dollars a month. The fact that the entire twelve thousand dollars was paid for the coal in advance of its use will not alter the accounting, if it is to be strictly correct. It is to be noted that in this respect the accounting for depreciation is no different. *The company buys and pays for its property in advance and then uses it up and its accounts* should reflect the expense currently as it is used up''* (Italics ours). (Brief of Bell System quoted by Interstate Commerce Commission in its Order of July 28, 1931—177 I. C. C. 351, at 399),

or the expense charge to cover depreciation as defined by the Interstate Commerce Commission:

> "We therefore find that depreciation is the loss in service value not restored by current maintenance and incurred in connection with the consumption and prospective retirement of property in the course of service from causes against which the carrier is not protected by insurance, which are known to be in current operation, and whose effect can be forecast with a reasonable approach to accuracy" (*Depreciation Charges of Telephone Companies*, 177 I. C. C. 351, at 422 (1931)),

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*The Interstate Commerce Commission stated its understanding of the Bell System's position:

> "These quotations leave no doubt that under this view of the matter the depreciation charge is based on the cost of property which has been consumed or used up, in service during the year; that the depreciation reserve is intended to represent the accumulated total cost of property which has been used up in this way but has not yet been written out of the investment account; and that money corresponding to this reserve has gone into the general funds of the company and thence into property which has taken the place of the part which is deemed to have been used up, thus maintaining the capital unimpaired." (Depreciation Charges of Telephone Companies, 177 I. C. C. 351, at 399.)
>
> "The balance in the depreciation reserve, they (telephone companies) say, does not necessarily reflect the accrued depreciation of the property but should correspond to the 'reserve requirements for plant in service.' In other words, the 'reserve should at any time reflect approximately the difference between the total cost less net salvage of the plant then in service and the total of the accruals to be made in respect of that plant during the remaining service life'." (Ibid., at 400.)

or the expense charge to cover depreciation as defined in Section 23 of the Uniform System of Accounts:

> "*Depreciation of plant and equipment.*—Telephone companies should include in operating expenses depreciation charges for the purpose of creating proper and adequate reserve to cover the expenses of depreciation currently accruing in the *tangible fixed capital*" (Italics ours) (O.R. IV, 1190).

Under the conditions above stated, the annual advance contributions are no more proper operating expenses of the period during which they were charged than would be a current charge to start a pension fund for employees who have not yet been hired (and who perhaps are not yet born) but who may be required by the expansion of the Company in 1931, 1944, 1954, 1964 and in 1974. (*Galveston Electric Co.* v. *Galveston*, 258 U. S. 388, 399; *Lincoln Gas & Electric Co.* v. *Lincoln*, 250 U. S. 258, 267.)

B.

Appellee's use of the straight line method of computing the advance contributions is in violation of law.

Appellants do not question the right of Appellee to use the straight line method of computing the annual installments as current reimbursements for depreciation on *property in service.*

The issue is:

Assuming Appellee has the constitutional right to collect advance contributions, does it have the legal right to use the straight line method in determining the annual amounts thereof prior to the date when the future project is scheduled to be placed in service?

Fair dealing and the necessary implications from Appellee's declared motive in collecting the advance contribu-

tions (*supra*, 402; R. II, 1438) requires that Appellee spread them over the period prior to such additions being placed in service in such manner as

(1) To assure that the principal of the fund plus the compounded income accretions thereon received prior to the scheduled date for the placing in service of Appellee's contemplated future investment, *will equal* but not *exceed* the number of dollars to which Appellee would be entitled if it had received reimbursement on the straight line method after the investment is in fact made.

Taking the Merrimac Building, it is clear that to provide $51,303.50* in 1974 does not require forty-eight yearly deposits of $1,069.65 each, but forty-eight yearly deposits of the following amounts giving effect to the following assumed earning rates thereon (R. VIII, 4654):

4%	5%	6%	7%	8%
$368.41	$272.83	$199.98	$145.24	$104.66

Appellee's expense charges covering annual advance contributions were computed on the basis of the $1,069.65 installments (R. II, 1104).

(2) To assure that if the principal of the fund *plus* the compounded income accretions thereon received prior to such scheduled date for the placing in service of Appellee's contemplated future investment, exceed the number of dollars to which Appellee would become entitled by way of reimbursement on the straight line method after the investment is in fact made, such excess earnings will in one form or other be reflected in benefit to the telephone users and not to the creditors or stockholders of Appellee. To make forty-eight yearly deposits of $1,069.65 each will provide at the end of forty-eight years not $51,303.50 but the

*48/58 x 62,000.

following amounts, giving effect to the following assumed earning rates thereon (R. VIII, 4655-6):

4%	5%	6%	7%	8%
$148,963	$201,121	$274,434	$377,875	$524,270

Appellee made no such provision (R. II, 1191).

(3) To assure that the earnings on the advance contributions will be used to minimize the burden of the telephone users who make them by applying such earnings to reduce the principal of the annual advance contributions during the period prior to the scheduled date for placing in service of Appellee's contemplated future additions. To require the present telephone users to pay $1,069.65 a year for 48 years, giving them the benefit of the earnings thereon either currently or at the end of the period, instead of reducing the principal of such contributions on an annuity basis giving effect to the compounded earnings to the dates when Appellee will become entitled to the earnings, is to convert the present telephone users into investors of capital. The hardship on such telephone users to raise the cash to make such investments, is as much to be considered as their equitable treatment after the investment is made.

(4) To assure that if the facts should turn out to be different than those which Appellee assumed as the basis for its computations, neither Appellee nor the subscribers will be prejudiced thereby for the benefit of the other. In 1929, Appellee could foresee only the factors which would continue the expansion of its operations and not the conditions which might retard them (R. II, 1108). Not foreseeing the depression, it made no provision for such possibility (R. I, 761). But it is obvious that if on account of the depression or of a slowing up of business, Appellee should defer the date set by Mr. Turner for any future

additions, as was in fact done in 1932 (R. II, 1109), but not the final date of retirement of the building as a unit, the deferment will shorten the life of the contemplated future additions. This shortening effect tends to increase current depreciation expense charges to the present telephone users and to decrease the depreciation expense charges for the future generation of telephone users forty to fifty years hence (R. II, 1109).

(5) To assure that Appellee receives no additional advantage from the fact that at the date of making the contemplated future investment (as in the case of the $62,000 future addition to the Merrimac Building to be placed in service in 1974 to be retired in 1984), Appellee will have collected through annual advance contributions made prior to 1974, an amount equivalent to at least *several years'* depreciation yet to take place in the property.

The straight line method of computing annual depreciation expense charges on property in service can not be used to compute the annual advance contributions for anticipated depreciation on contemplated future additions because there is no way by which the subscribers can be assured fair treatment in respect to any and all of the five situations above stated.

Such fair treatment can be effected only by computing such annual advance contributions on the following basis: to wit, in each year, beginning with the year of the original installation, annual annuities to provide the exact amount to which Appellee would have been entitled each year subsequent to the scheduled date of the contemplated future addition, had Appellee computed the depreciation expense charges applicable to such future investment on the basis of spreading the amount thereof over the period of its own service life.

Appellee uses such annuity method in its actuarial computations to provide the pension fund requirements covering employees in service (R. VII, 4162, 4163, 4175-6) and in its engineering studies to determine the advisability of placing in service future additions (R. V, 3268-82; R. VIII, 4640; R. VIII, 4451; R, II, 1993-4).

C.

Appellee's financial program to provide advance contributions produces the fantastic result of making its telephone customers involuntary investors who provide a large portion of its current capital in service without their right of interest therein.

(1) The effect of requiring the advance contributions is to provide Appellee with a fund to make future investments.

(2) The effect of the factor of growth is to constantly replenish and maintain such fund (*infra*, 431-2).

(3) The effect of Appellee's claim that the advance contributions are to be included within the scope of "depreciation expense" is to attach the same legal consequences thereto which Appellee claims should attach to depreciation expense reimbursements made through the use of the straight line method of calculating depreciation expense charges. Such legal consequences are that the permanent fund plus all earnings thereon are free and clear of the claims of the subscribers from whose telephone service charges the fund was collected, and are free and clear of any claim of credit to such subscribers on account thereof in determining the return to which Appellee is constitutionally entitled or otherwise.

The combination of these three effects creates the following fantastic results:

(1) To the extent of the amount of the advance contributions plus the earnings thereon, Appellee has made its telephone users *involuntary investors in its capital employed in their service, without their right of interest therein.*

(2) The total of the fund of such advance contributions goes into the treasury of Appellee to provide its capital requirements and working capital and to become its additional assets (a) to increase the security for its outstanding credit obligations; and (b) to increase the equity behind its outstanding capital stock.

The importance and significance of this customer—involuntary—investor relationship may be noted from the fact that the largest portion of the capital funds raised by utilities and others in the open market is to provide for extensions and betterments (R. VII, 4336f-4340g).

(3) The earnings on this fund are reflected into the earning and surplus accounts and not into the depreciation reserve account. Such earnings, therefore, provide and make available additional earnings and assets to meet the current interest and dividend requirements on Appellee's capital obligations, to meet the maturing principal of its outstanding credit obligations, and to improve the earning record of Appellee in its relation to its capital investors.

(4) To the extent that on account of the depression or of a slowing up of business, Appellee should defer the date set for any contemplated future additions, as was done in 1932 (R. II, 1108), but not the final date of retirement of the building or equipment as a unit—*the*

depression will increase the period during which Appellee's capital investors will continue to reap the benefits of the earnings on the fund already contributed by its subscribers.

Such a fantastic result, if it does not condemn the program, should require at least clear and convincing proof of the legality thereof, the necessity therefor, and each of the factors entering into the determination thereof (*Missouri Rate* Cases, 230 U. S. 474). The following discussion shows that Appellee failed in its proof.

D.

Appellee's financial program to provide the advance contributions is based on and gives effect to arbitrary assumptions.

(1) Appellee *assumed* that the price level for labor and material in 1931, in 1944, in 1954, in 1964 and in 1974 would be the same as the price level for labor and material which prevailed in Chicago in 1928-1929 (*supra*, 398).

This assumption gave no effect to the facts that:

(a) The experts of Western, a constituent part of the Bell System, had concluded as early as 1924 that building costs in Chicago would drop in the ensuing ten years and had concluded in 1927 that they would drop from 1931 to 1940, approximately 15% below the 1927 building cost level (R. V, 3657-8; R. V, 3659-73) which latter cost level was within 4% of the building cost level of 1928-29 (R. IV, 2679). Indeed, in its presentation on Western's Profits and Prices, Appellee gave effect to such conclusion and the District Court's findings were based thereon (*supra*, 308).

(b) Appellee's claimed justification for much of the expense covering the American Company's Development and Research work was predicated on the development by that work of the telephone art during the period following 1923 to the point where reasonable expectation may be had that in the distant future the cost of new plant to be added will be cheapened in relation to Appellee's existing plant now in service (R. I, 695).

(c) Appellee claimed that the benefits of the American Company's Development and Research work subsequent to 1932 would be reflected in the plant of the Associated Companies and particularly in the exchange plants to a greater extent than for the period prior thereto. On that basis, a foreseeable condition exists of cheaper plant and higher salvage and longer life (R. I, 695). Indeed, the American Company's relationship in this respect is one of the unique factors which the Interstate Commerce Commission and this Court in its Opinion of December 1, 1930, emphasized to be taken into account in respect to depreciation expense charges in the Bell System (*Depreciation Charges of Telephone Company*, 177 I. C. C. 351, at 402 (1931); *Smith* v. *Illinois Bell Tel. Co.*, 282 U. S. 133, at 151 (1930)).

(d) The events since 1929 have rendered unreliable prognostications on the basis of 1928-9 prices on which to predicate findings of confiscation (*Los Angeles Gas & Elect. Co.* v. *Railroad Commission*, 289 U. S. 287, at 311 (1933)).

(2) Appellee's claimed provision in respect to the character of plant to be placed in service and the costs thereof fifty years hence is contrary to the American Company's position that such provision is impossible (*infra*, 436).

(3) Appellee *assumed an expanding business to* 1974 *which would require periodic additions.* What conditions would exist in the neighborhoods during the next forty years to require the assumed expansion program, Appellee did not know (R. II, 1110-1111); its long-time forecasts as aids to its construction program—*i. e.*, its fundamental plans—did not extend beyond twenty years (R. II, 1105). What facts there were to justify the conclusion that the telephone industry in general and in Chicago in particular, would not reach the saturation point in the next forty years or that the rate of growth of the infancy of the industry would continue indefinitely in general and in Chicago in particular do not appear.* It does appear, however, that the recent extension of the telephone use to the classes of lower than average earning power of a few years ago has already reached the point where Appellee claims its growth has become sensitive to economic conditions (R. I, 157).

To Appellee it was not even necessary to visualize the conditions in any particular neighborhood as a basis for its assumptions. Instead, its assumptions were predicated on

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* Beginning with 1900 there was one Bell telephone to each of the following number of the total population of Chicago and of the United States:

	Chicago. (O.R. VI, 2299)	United States.
1900	61	90 (O.R. VII, 2637)
1908	12	22 (O.R. VII, 2431)
1910	9	17 (O.R. VII, 2452)
1915	6	11 (O.R. VII, 2542)
1918	5	10 (O.R. VII, 2577)
1922	4	8 (O.R. VII, 2637)
1923	4	7 (O.R. VII, 2656)
1929	3 (a)	6 (R. VIII, 4430c)
1930	3 (a)	6 (R. VIII, 4430c)

(a) R. VIII, 4812; Department of Commerce Bureau of The Census—"Estimated Population July 1 For Cities Having 100,000 or more Inhabitants on April 1 of Last Census Year Prior to Year Estimated."

the proposition that if in the case of the Merrimac Building, it guessed wrong as to:—

(a) the necessity for any expansion program;

(b) the dates assumed for the expansion to take place; or

(c) the amount of the additions to be made or the retirements to be had, or salvage to be recovered—it might also guess wrong as to one or more of these same three essentials in respect to one or more of the many other buildings of similar character now in service in Chicago and included in the same study, or which might come into existence and be included in future studies, and such errors would in the long run so counteract each other that a possible injustice to the present or future subscribers for an error in one case would be overcome by the possible injustice to Appellee from its error in the other case or cases (R. II, 1111).

(4) The probability of error in Appellee's assumptions is demonstrated by the following comparison of Appellee's estimates for the 1929 study on which the 1930 depreciation expense charge was made and its actual experience in respect thereto:

In 1929 Appellee estimated the contemplated gross additions to Manual Central offices for 1930 to be $1,435,000 and for 1931, $1,587,000. Appellee's actual gross additions for 1930 were $1,571,090, or 10 per cent *more* than the 1929 estimate and for 1931 were $690,304, or 56 per cent *less* than its 1929 estimate. Appellee's 1929 estimate of the contemplated retirements for 1930 was $18,000 and for 1931, $1,853,187. Appellee's actual experience during these two years showed actual retirements in 1930 of $378,811, or 2000 per cent *more* than the 1929 estimate and

in 1931 of $1,839,467, or 1 per cent *less* than its 1929 estimate (R. VII, 4090a).

Mr. Turner's estimate for contemplated net additions for 1930 was 19 per cent *higher* than Appellee's actual experience in 1930, and the 1931 estimated net retirements were 77 *per cent less* than the actual. For the two years 1930 and 1931, Appellee estimated contemplated net additions of $1,150,813; in fact Appellee only made $43,116 net additions during these two years or 4 per cent of its estimate.

The following variation between Appellee's 1929 estimate of Appellee's contemplated future additions and retirements in 1930 and 1931 for four central offices and Appellee's actual experience in respect thereto is instructive:

	Estimated Gross Additions	Actual Gross Additions	Estimated Retirements	Actual Retirements	Estimated Net Additions	Actual Net Additions	Percentage of Estimated Net Additions (e) to Actual Net Additions (f)
	(a)	(b)	(c)	(d)	(e)	(f)	
Merrimac							
1930....	61,300	59,735	400	10,345	60,900	49,390	
1931....	71,000	23,378	3,100	3,244	67,900	20,134	
Total...	132,300	83,113	3,500	13,589	128,800	69,524	185%
Kedzie							
1930....	36,000	122,411	700	16,884	35,300	105,527	
1931....	51,100	14,527	6,200	8,515	44,900	6,012	
Total...	87,100	136,938	6,900	25,399	80,200	111,539	72
Prospect							
1930....	103,000	40,083	700	12,905	102,300	27,178	
1931....	117,000	9,723	6,200	7,069	110,800	2,654	
Total...	220,000	49,806	6,900	19,974	213,100	29,832	714
Stewart							
1930....	179,400	77,426	1,000	21,979	178,400	55,447	
1931....	144,000	6,811	8,000	3,575	136,000	3,236	
Total...	323,400	84,237	9,000	25,554	314,400	68,683	536

That the probability of error is inherent in the process used by Appellee in its determination and is not due necessarily to sudden changes in conditions, is apparent from the comparison which Appellee made in 1932 between the assumptions and conclusions which it would have used to

determine proper depreciation rates for the years 1923 to 1927, inclusive, with those previously employed by it in arriving at the depreciation expense charges shown on its books.

Mr. Turner, as Appellee's witness on depreciation expense charges in 1932, looking back to 1923, would have established in respect to the same central office equipment which Mr. Hale, as Appellee's depreciation expense expert, considered in 1923, depreciation expense charges for that year in an amount which was $150,253.19 *less* than the amount of depreciation expense charges therein fixed by Mr. Hale (R. II, 1278). But Mr. Turner on cross-examination admitted that he himself was in error in his 1932 judgment of the proper depreciation expense charges for 1923 on central office equipment to the extent of $50,000—Mr. Turner having failed in his restudy of Mr. Hale's study to give effect to the lower depreciation rate applicable to the dial central office equipment which went into service on or before July, 1923 (R. II, 1284). So that according to Mr. Turner's judgment in 1932, as corrected by the cross-examination, Appellee's depreciation expense charges on central office equipment as shown on its books and as established by Mr. Hale were too high by $200,253.19.

According to Appellee's Exhibit A-125 (R. IV, 2853), the average service life of central office equipment as viewed by Mr. Hale was only ten years. According to Mr. Turner, Mr. Hale had developed by his mathematical computation an average service life in 1923 of 10.51 years which service life Mr. Hale *lowered,* as a result of applying the factor of judgment, to ten years. But Mr. Turner's mathematical calculations developed that the average service life should have been 11.8 years as of 1923, which

service life Mr. Turner *raised* as a result of applying the factor of judgment to thirteen years (R. II, 1285). But Mr. Turner's judgment as thus expressed, required further adjustment to give effect to the actual experience of central offices actually retired between 1923 and 1932, resulting in a final judgment of average service life of 12.52 years, which figure Mr. Turner rounds out to 12.5 years (R. VI, 3818).

Turn, however, to an item of property—exchange underground cable—which is viewed to have a much longer average service life—25 years—and therefore to be subject to influence in greater degree by the factor of judgment. Mr. Turner in 1932 found that Mr. Hale's conclusion in respect to this item in 1923 resulted in an understatement of depreciation expense charges, in the amount of $157,246.48 (R. VI, 3822). Mr. Turner would have increased the depreciation expense charges in respect to this item over Mr. Hale's determination by 33 per cent (*Idem*).

Turn to another item—station apparatus—having an average service life, according to Mr. Hale, of five years, as reflected in the recorded depreciation expense charges—and having an average service life, according to Mr. Turner of seven years, as reflected in Mr. Turner's restudy. Mr. Turner found in 1932 that Mr. Hale's conclusion in respect to salvage to be derived therefrom was too conservative and as a result thereof Mr. Turner found that Appellee's books recorded excessive depreciation expense charges in respect to this item by $108,671.38 (R. VI, 3822).

It is instructive to note also that the differences from Mr. Hale's conclusions which Mr. Turner developed in 1932 for the year 1923, dealing with five items of plant, continued in some subsequent years as to some of the

items, but, according to Mr. Turner, with different effect (R. II, 1279-81).

E.

Appellee's justification for its financial program to provide advance contributions is based on and gives effect to arbitrary assumptions.

First Ground for Justification.

(1) Appellee's justification (*supra,* 401) based upon the accounting rules of the Interstate Commerce Commission in respect to the group basis of depreciation treatment disregards the essential fact that such rules cover *plant in service.* Nowhere in the Uniform System of Accounts or in the two Orders on Depreciation entered in 1926 and 1931 (O.R. I, 259-386; 177 I. C. C. 351 (1931); R. VIII, 4463-76), does the Interstate Commerce Commission by express language or implication extend its rules to include therein contemplated future additions to be acquired and to be placed in service under the conditions of this record.

There is no more reason in Appellee's justification than there would be to claim that the group basis of determining pension fund requirements covering employees in service justified the advance provision for pension fund to cover employees not yet in service but who are expected to be placed therein on the expansion of the business 25 years hence.

Second Ground for Justification.

(2) Appellee, on rebuttal on the day before the closing of the final hearings, presented a study purporting to show a recomputation of the depreciation expense charges for

the period 1923 to 1931, inclusive (R. II, 1426; R. VIII, 4949-56b). The recomputation (a) eliminated advance collections applicable to future additions to buildings and central office equipment in service, and (b) applied the unit basis of depreciation treatment to certain other classes of property instead of the group basis, as under present methods. The decrease arising from elimination of the advance collections was estimated at $1,470,000; the increase arising from the application of the unit instead of the group basis of depreciation treatment was estimated at $2,300,000, resulting in a net increase in expense of $830,000 (R. II, 1388). The necessary connection between such decrease and increase is claimed by Appellee to be based on the following consideration:

Appellee claims that the necessary implication of Appellants' contention that depreciation expense charges applicable to additions to buildings and central office equipment should be collected during the period *after* installation of such additions and *not in advance thereof,* is that the depreciation expense charges for each central office or building in service must be determined on the basis of its own individual experience and not on the basis of the group average experience of buildings or equipment in service. Appellee claims further that such individual or unit basis of depreciation treatment of each building and central office necessarily implies that similar individual or unit basis of depreciation treatment should be applied to every other unit of property to which Appellee now applies the group basis of depreciation treatment (R. II, 1427-32).

Appellee's position is fundamentally unsound and its recomputation meaningless. Under its present practice, Appellee computes the annual depreciation expense charges for all items of plant in service other than buildings and

central offices, on the basis of the group average life experience, and applies the group average to the individual units, in manner similar to the actuarial methods of life insurance (R. I, 773). In the case of buildings and central offices, Appellee now computes the annual depreciation expense charges by determining the life of each individual building and office on the basis of its *own* experience, and then compositing the depreciation expense charges so determined (R. II, 1773; R. IV, 2864a, 2866a). But the reason that Appellee uses the average experience in the one case and the individual experience in the other is *not that advance collections* are recovered applicable to additions to buildings and central offices in service and are not collected in the case of the other classes of plant; the fact of such advance collections has nothing to do with such difference in treatment. Appellee selects the unit basis for one class of property in service and the group basis of depreciation accounting for the other classes of property in service on the ground, as it claims, of accounting convenience; that, unlike poles and desk stands in service, neither buildings nor central offices in service constitute such a natural group in each case that the average experience of the group can be fairly substituted for the actual experience of each building or each central office.

Appellants' objections to advance collections applicable to future additions to buildings and central office equipment would apply as well if Appellee had used the group basis of depreciation treatment for such classes of property in service, and in connection therewith had made provision for such advance collections. Such objections are distinct from and in addition to any objections that arise from Appellee's use of the unit instead of the group basis of depreciation treatment for *buildings and central office equipment in service* (R. III, 2431; R. II, 1762).

The elimination of the inflation in charge arising from the advance collections has no possible relation to the question whether the individual or the average group experience should be used in determining the depreciation expense charge of such *property in service*. Such elimination certainly carries with it no possible implication in respect to the depreciation treatment of the property in service.

Nor does it follow that Appellee's continued use of the unit basis of depreciation treatment of buildings and central offices in service, but eliminating advance collections for future additions thereto, carries with it the necessary implication that Appellee must use the unit basis of depreciation treatment also for poles, desk stands, underground cable, and all other items of property in service to which it now applies the group basis of depreciation treatment. Under its present practice, Appellee does not justify its use of the group basis of depreciation treatment to such items of plant on the basis of the depreciation treatment of buildings and central office equipment; on the contrary it denies there is any similarity between them to justify similar treatment. The elimination of the advance collections does not eliminate such dissimilarity and has no relation to it.

Corresponding to the unsoundness of the basis for the recomputation, is the arbitrariness of the many assumptions which enter as to some items, and the complete lack of data to support the recomputation as to other items involved therein—glaring proof of the lack of practical wisdom of the District Court's lending aid to Appellee to evade the conclusion by the State of Illinois in common with other states and with Congress: that the subject matter of depreciation expense charges is one which cannot safely be

left within the managerial discretion of the utility itself (*supra,* 383). To illustrate:

(a) Appellee's recomputation on manual central office buildings included ten buildings, which were to be converted into dial buildings by 1944—seven of which were estimated to have a service life extending to and beyond 1970* and three of which beyond 1980.** Appellee's recomputation assumes that the elimination of further additions results in a decrease of 25% in its estimate of the salvage of all buildings, including these ten buildings from the estimate based on their inclusion; if viewed without future additions the average salvage which these buildings would bring would be only 15% of their estimated book investment at the time of retirement, instead of 20% thereof (R. VIII, 4950).

This conclusion was reached in the face of the fact that it involved a knowledge of the character of the structure at retirement, which could not be determined at least until after the conversion, and a knowledge of conditions surrounding the structure at the time of retirement,*** which

*(R. IV, 2866a.)

Austin	1977	Pullman	1979
Hyde Park	1974	Rogers Park	1975
LaFayette	1976	South Chicago	1978
Lakeview	1975		

**(R. IV, 2866a.)

Beverly	1980	Merrimac	1984
Kildare	1983		

***Mr. Turner testified:

"Although the (dial) buildings are expected to have a longer life and will therefore be older at the time of disposal, I have estimated the same net salvage for dial buildings that I have used for manual buildings, that is, 20 per cent. I did this because I think a larger percentage of these buildings will be located more favorably with reference to commercial streets or areas. There are also certain parts of the design of the buildings more attractive to commercial purchasers; one of these is that the first floor is placed at street level, whereas in most of our existing buildings, the first floor is several feet above the level of the street" (R. I, 770).

Appellee did not attempt to guess, as appears from the following testimony of its depreciation expense expert (R. II, 1110):

> "We did not attempt to visualize any conditions that might exist in 1974 with reference to a particular neighborhood."

(b) Appellee's recomputation showed that inclusion or exclusion of advance collections applicable to future additions of dial central office buildings would not change the depreciation rate thereon (R. VIII, 4950). But an examination of the work sheets on this item (R. VIII, 4950) disclosed that its conclusions assumed two variations from the previous study, upon which the recorded rates were established. In its previous study, wherein the future additions were considered, Appellee computed an average life of 35 years and 20% salvage. In the restudy, wherein it disregarded additions, it assumed a life of 30 years but assumed salvage of 7%—a reduction in salvage of 65% (R. VIII, 4950).

As bearing upon the weight to be given to this particular item, Appellants direct attention to the following facts:

On account of the lack of experience with dial property, the 20% salvage figure used in Appellee's previous study was based on the experience of manual office buildings and was established at the same salvage rate as that of manual office buildings (R. I, 770). However, it now appears that in the recomputation, the prognosticated salvage at the end of the service life of manual central office buildings represents a drop from 20% to 15%—25% reduction (*supra*, 426); the prognosticated salvage on dial buildings calls for a drop from 20% to 7% representing a 65% reduction. No reason for this sudden shift in position appears in the record. Mr. Turner, as Appellee's witness,

testified in respect to salvage on dial buildings in the recomputation:

> "Now, I worked that out very roughly; I have taken what I consider a typical example, and determined what proportion of that initial construction might be expected to survive through an entire period of 50 years, what portion would be retired when an addition is made, and what portion is represented by building equipment, elevators, steam heating plants and so on, and how long they would live on the average" (R. II, 1432).

Apparently, however, this rough treatment was accurate enough to cause the reduction in salvage to be exactly enough to offset the increase in life due to the elimination of future additions so as to maintain unchanged the depreciation rate, irrespective of the inclusion or exclusion of the future additions.

Appellee's vision of the small value at retirement of these buildings extending into such remote future to 1984 is in striking contrast to the closer vision which Appellee had when its witness, at the final hearings, viewed as of December 31, 1930, the depreciation in valuation new of the buildings to be retired in 1931 and 1932 and the per cent condition for the purpose of valuation:

	Date of Retirement. (R. IV, 2866a.)	Per Cent Condition of Reproduction Value New at December 31, 1930, for Purpose of Valuation (R. VII, 4086-7).
Dearborn	1931	94.21%
Delaware	1931	85.57%
Canal	1932	89.56%
Main	1932	75.78%
Monroe	1932	90.37%
West	1932	85.97%

And Appellee contended at the hearings before the District Court (R. IV, 2682A; R. III, 2390) and contends on

cross appeal before this Court (R. IX, 5064) that it is entitled to receive a return on such per cent of the valuation new of these buildings in 1930 and 1931 (*supra* 428). Appellee's contention is on the basis presumably that a purchaser of the property, or Appellee as the reproducer of the property, would pay these per cents of the value new of the respective properties, even though within a few weeks or months thereafter their entire earning power would be destroyed.

(c) In respect to dial central office equipment we have an extraordinary presentation. Appellee claims that the salvage on manual central office equipment has been lowered below normal for the immediate future because of the introduction of the dial operation (R. I, 762). Since its estimates pertaining to dial equipment are based on the manual equipment, it follows that unless there comes into operation a new method to replace the dial operation, it is reasonable to expect that in 1984 when the Merrimac Building is taken out of service the salvage on the equipment therein will be greater than the present estimate of salvage, which is admittedly subnormal. But in the recomputation, Appellee not only did not give effect to this consideration; he decreased the salvage.

(d) Appellee's recomputation in respect to station equipment, pole lines, aerial cable and office furniture and fixtures, showed that its depreciation expense charges would be increased if it changed from the group basis to the unit basis of depreciation treatment. Although Appellee admitted it had no working papers whatsoever to support its recomputation, it did conclude that for the period 1923 to 1931, inclusive, the change would result in an increase of $901,200, representing an increase of an even 5% on each year's actual charge (R. VIII, 4955), which increase was

largely responsible for the final result of the recomputation. All this in the face of the elaborate studies which Appellee claims necessary to arrive at the proper depreciation rate in respect to these items (R. IV, 2867-2870f, 2875-2881).

(e) Appellee's recomputation in respect to underground cable showed that its depreciation expense charges would be increased, if it changed from the group basis to the unit basis of depreciation treatment, by $1,394,967, representing an even 15% of each actual charge. But as to this class of property the actual charges were predicated on studies based in part on incomplete data of the older records and resulted in an overaccrual of from 9% to 15% (R. II, 1717). The recomputation employed the same data (R. II, 1432).

Third Ground for Justification.

(3) Appellee's justification on the ground that its subscribers are benefited (*supra*, 402), disregards its own experience and the necessary consequences of the assumption on which its program is predicated.

Appellee's position would be sound only if Appellee planned that its operations should be conducted through one or more offices built *at the same time*, and that the expansion of such operations should be met only through *additions* to such *existing office or offices* and not through the placing in service of *new offices*.

It is obvious however that if a new central office is placed in service during the period when the late additions are being made to an existing office and the same depreciation treatment is used in connection therewith, as was used for the original office, the subscribers of the late period of the existing office, while receiving the advantage of the advance collections made during the period prior to the installation of the late additions thereto, are being charged with ad-

vance collections to provide a portion of the anticipated depreciation expense on the contemplated future additions to the new office. To the extent that expansion is met by the placing in service of *new structures* rather than by additions to *existing* structures, do the burdens of advance collections offset benefits realized from additions to such existing structures.*

In Chicago, during the period 1923 to 1931, inclusive, there were added fifteen new central offices of which thirteen were dial, representing an outlay of $20,900,000 (R. VII, 4089), and two were manual, representing an outlay of $850,000 (R. IV, 2864a). The amount of future additions which Appellee included in its computations upon which the depreciation expense charges covering these central offices were based is not in the record and can not be definitely fixed (*supra*, 405). During the same period eight central offices were retired from service (R. II, 1735). The dial program of Appellee calls for the entire city to be dial operated by the end of 1944 (R. II, 1109). On the other hand, during the period 1923 to 1931, the additions to existing offices aggregated approximately $30,000,000 (R. IV, 2776).

Of the many existing manual central offices which are scheduled to go out of service during the period to 1944, some are scheduled to have no additions during the last quarter or more of service life (R. II, 1728). But as dial central offices, according to Appellee, enjoy a much longer

*Appellee's depreciation expense witness, Mr. Turner, testified:

"A. Of course, our problem is broader than just for the City of Chicago; we have numerous exchanges outside of Chicago that have but a single office, and there you would get this inequitable condition that I spoke of. I mean by 'inequitable' that it would place a burden on the subscribers attached to the office towards the end of its over-all life. Even in the City of Chicago the situation resulting from the consideration of future additions would not necessarily equalize the condition unless it so happened that at a particular time the new offices, with their lower depreciation rate, would exactly offset the older offices with their higher depreciation rates" (R. II, 1138-39).

service life than manual central offices (R. I, 762), the effect of such longer service life will offset the effects of the shorter service life investment of later additions of the existing structure, and the burden will still remain covering the advance collections applicable to such new offices. The effect of the factor of growth is to constantly replenish and maintain the fund of advance collections for the benefit of Appellee.

Moreover the contemplated result of Appellee's program would be upset if inadequacy as a factor in the shortening of the life of the existing structures were removed by Appellee through the installation of such new offices. In such case, Appellee's subscribers contribute advance contributions applicable to the future additions to the new offices; continue to pay the depreciation expense charges during the full period of the service life of the existing offices predicated on the rate which gives effect to additions which will never be made; and receive no credit for the advance contributions made on the basis that such additions would be made. In such case Appellee alone has benefited by the advance collections to which it is not entitled (*supra*, 403, *et seq.*). The record shows that Appellee has relieved inadequacy in respect to existing structures by new structures. In the case of the Edgewater manual central office installed in 1907 (R. IV, 2864A) and estimated to be retired in 1940, the record (R. II, 1729) shows that the capacity would be reached September 30, 1928, requiring additions thereto. But Appellee did not make the additions. Instead it built the new Longbeach office within one block of the Edgewater office to relieve the older office (R. II, 1728-30). Similarly, Appellee placed in service the new Merrimac office to relieve three existing offices instead of providing additions thereto (R. II, 1730-31).

DISCUSSION AS TO CONTENTION NUMBERED IV.

IV.

THE DISTRICT COURT COULD NOT MAKE A VALID FINDING ON DEPRECIATION EXPENSE CHARGES ON THE BASIS OF APPELLEE'S SHOWING OF ITS RECORDED DEPRECIATION EXPENSE CHARGES ADJUSTED "TO MAKE THE AMOUNTS OF SUCH ALLOWANCES CORRESPOND WITH THE PRESENT VALUE OF THE PROPERTY AT THE TIME SUCH AMOUNTS WERE SET UP ON THE BOOKS OF THE COMPANY."

Preliminary Statement.

Appellee made a showing of its recorded depreciation expense charges for each year 1923 to 1931, inclusive, adjusted to its reproduction cost new estimate of the Chicago Intrastate property in reliance on the case of *United Railways* v. *West* (280 U. S. 234 (1930)). Such adjustment was made by applying to its reproduction cost new estimate of the property the same depreciation class rate which it had applied to the book cost of plant (Appendix, p. 97).

The adjusted amounts exceeded the recorded amount for each year by amounts ranging from $712,000 to $1,912,000 per year (Appendix, p. 97). No corresponding figures appear in the record for 1932.

The District Court stated that it gave consideration to these adjusted charges; how much, the record does not show, and it is impossible to determine (*infra*, 448). Ap-

pellants point out five reasons why no consideration should have been given thereto:

A.

Appellee's financial program to provide annual advance contributions for anticipated depreciation on contemplated future additions to Buildings and Central Office equipment precludes the possibility of using the reproduction value of property in service as a base for the computation of the amounts thereof.

Appellants here discuss only the propriety of using the rate base as a yardstick from which Appellee computes the number of dollars of annual contributions for anticipated depreciation on contemplated future additions.

Assume $500,000 is the book cost of the original investment in 1926 to be retired from service in 1976 and $500,000 is the additional investment to be put in service in 1966; assume no salvage to be had at the date of retirement in 1976. The annual advance contributions required, according to Appellee would be 1⅓% of $500,000 for 40 years or $6,666 per year, aggregating $266,000 (*supra*, 403). It is obvious that if the 1⅓% rate is applied for 1926 to a base amount more than $500,000, or is applied in any year thereafter to 1966 to a base amount in excess of $500,000, the advance contributions will be proportionately increased and Appellee will have a fund in excess of its $500,000 requirements and in excess of the amount which it claimed necessary to make it whole in 1976. By changing the amount of the rate base and not making corresponding change in the rate applied thereto, Appellee would be unjustly enriched if the effect of the change were to increase the

amount of the rate base and would be prejudiced if the effect were to reduce the amount of the rate base.*

As the reproduction cost figures were much higher than the book cost figures, the effect of applying the same rate thereto as Appellee applied to the book cost figures, was to *increase contributions for anticipated depreciation beyond the amount which Appellee claimed it would need* for that purpose—Appellee and its capital investors would be unjustly enriched thereby at the expense of the telephone users.

So long as the depreciation rates and charges include as a part thereof advance contributions for anticipated depreciation on contemplated future additions, Appellee is precluded from the possibility of calculating depreciation expense charges in respect to central offices and buildings —which represent over 40% of total depreciable property (*supra*, 403)—on the basis of the value of its property in excess of that evidenced by book cost without revising the depreciation rate in a manner to prevent its unjust enrichment as above defined.

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*Appellee's depreciation expense witness, Mr. Woodford, testified:

"If the rate were applied to any amount other than cost the amount of the accrual produced would be different than the amount based upon cost; that is obvious. If the reproduction costs were higher, the accrual would be higher, and if the reproduction costs were lower, the accrual would be lower than on the book cost basis. Actually, we do not make our accruals on our books on that basis; we make our accruals on the basis of cost.

The percentage which we apply on our books is for the purpose of accumulating over the entire life of the building, the amount which we expect to have invested in that building including the initial construction and the additions" (R. II, 1192).

B.

The investors in Bell Telephone securities "are not primarily interested in property, as such, but are interested in safeguarding the money invested in the property which so far as it will some day be lost in operations, is, therefore, what should be covered by the depreciation provision."

The situation in the Bell System is opposite to the situation which was before this Court in the *United Railways* Case and upon which the following conclusion was predicated:

> "One of the items of expense to be ascertained and deducted is the amount necessary to *restore property worn out or impaired*, so as continuously to maintain it as nearly as practicable at the same level of efficiency for the public service" (280 U. S. 253).

According to two of the American Company's experts on depreciation matters:

> "It is, of course, evident from what has just been said that the Bell System depreciation reserve is a retirement reserve, not a replacement reserve. Under the theory as stated, the amount of replacement cannot affect the amount of this depreciation expense. It is what the company loses in the way of original capital consumed which determines the amount of the loss, which would be exactly the same regardless of whether or not replacements are made. Telephone companies moreover seldom make replacements in kind, some other or different equipment or construction being usually necessary. It would be impossible to estimate years ahead what replacement costs are going to be, and in any event it is fairly certain that investors in telephone securities are not primarily interested in property as such but are interested in safeguarding the money invested in

> the property which so far as it will some day be lost in operations, is therefore what should be covered by the depreciation provision" (R. VI, 3781-2).

Consider the example which the Bell System used before the Interstate Commerce Commission to illustrate their position on depreciation just stated (*supra,* 407). Assume Appellee had on hand on January 1, 1200 tons of coal that it had bought and paid for at $10 a ton, and would use during the year 100 tons a month. To make the payment, Appellee borrowed from the American Company $12,000 to be retired at the end of the year, and arranged to make twelve equal monthly deposits in its local bank for ultimate retirement of the debt. Obviously each monthly deposit is not varied on the basis of what it might cost Appellee to replace the coal consumed during the current month, or at the end of the twelve months' period, or on the basis that Appellee will ever purchase any more coal.

To bring the above example within the specifications of the situation discussed in the *United Railways* Case, it would be necessary to assume that on January 1, Appellee not only purchased the 1200 tons of coal, but also contracted to have the coal merchant deliver to Appellee at the end of the year an additional 1200 tons of coal to replace the first purchase, and to be paid for at the date of delivery on the basis of the then open market price; and that Appellee arranged for twelve monthly deposits in the local bank during the year of the consumption of the first purchase to provide the purchase price for the second purchase. In such a case, each monthly deposit will vary as Appellee's estimate of the probable year-end market price of coal varies, and perhaps "this for all practical purposes" means "present value" (*United Railways* Case) at the date of the

deposit, if the foreseeable conditions justify such conclusion. The same result will follow if instead of the second 1200 tons being delivered at the end of the year, twelve monthly deliveries were to be made during the year of consumption of the first purchase, and payment was made at each delivery date on the basis of the then market price. The monthly deposits or payments for the second purchase are governed by the principle of the *United Railways* Case; to extend the principle also to the monthly deposits for the retirement of the debt incurred to finance the first purchase, would result in a surplus of deposited funds in a rising market and in a shortage of funds in a declining market for coal. If such deposits were turned over to or were earmarked for the American Company, it would then be either unjustly enriched or unduly burdened at the expense or for the benefit of Appellee's subscribers, from whose telephone service charges such deposits were provided.

There is no difference in effect between the assumed unjust enrichment and that which the American Company and other investors in Appellee receive under the District Court's findings on depreciation expense charges, which give effect to the *present value*, in excess of original cost, of the capital consumed and to be consumed during its service life in determining the *reimbursement* to which such investors are entitled on account thereof.

C.

The present record precludes the possibility of reaching the same conclusion of fact as that to which this Court attached legal consequences in the United Railways Case (280 U. S. 234), to-wit: the conclusion of fact that the cost of retired property at the time of replacement "is for all practical purposes present value."

This Court in the *United Railways* Case said:

> "The 'utility is entitled to see that from earnings the value of the property invested is kept unimpaired, so that at the end of any given term of years the original investment remains as it was at the beginning,' *Knoxville* v. *Knoxville Water Co.* This naturally calls for expenditures equal to the cost of worn out equipment at the time of replacement; and this for all *practical purposes means present value*" (280 U. S. 254).

The record in the instant case discloses that some buildings in service and additions to be made thereto to 1974 are not expected to be retired until 1984 (R. IV, 2866a); that some central office equipment in service and additions to be made thereto to 1943 are not expected to be retired until 1944 (R. IV, 2866b); that the foreseeable values of buildings and equipment are expected to be less than current value based on current prices (R. I, 352); that Appellee has charged to expense large license payments whose justification is represented to be the future cheapening of the newer plant (*supra*, 416).

The record in the *United Railways* Case permitted this Court to attach legal consequences to the *conclusion of fact* that the cost of retired property at the time of replacement is for all practical purposes "present value." The record in the instant case precludes the possibility of

reaching the same *conclusion of fact* as that reached in the *United Railways* Case. The legal consequences attached to the facts of the *United Railways* Case can have no application to the instant case.

D.

The base which Appellee used in its depreciation expense computations was not the "present value" of the property which this Court in the United Railways Case held was the proper base for depreciation expense computations in respect to the property covered thereby.

The "present value" referred to by this Court in the *West* Case is the "present value" determined in accordance with its opinion in *McCardle* v. *Indianapolis Water Co.* (272 U. S. 400), wherein it held (408):

> "But in determining present value consideration must be given to prices and wages prevailing at the time of the investigation; and in the light of all the circumstances, there must be an honest and intelligent forecast as to probable prices and wage levels during a reasonable period in the immediate future."

Appellee's presentation of Western's Profits and Prices to show the reasonableness of Western's prices used in Appellee's reproduction estimates of each year precludes the possibility of using them as "present value" (*supra*, 343). Such estimates are grossly in excess thereof (*supra*, 344).

Similarly, Appellee's reproduction estimate of buildings based on prices current in the year of revaluation does not represent "present value" in each such year and is grossly in excess thereof (*supra*, 347).

E.

Appellee's position before the District Court in 1932 repudiates the position which it took in the 1929 hearings in this case, in the regular course of its business in relation to its investors, and before the Interstate Commerce Commission, since the decision in the United Railways Case.

Appellee's position at the 1932 hearings repudiates its presentation at the 1929 hearings of the depreciation expense charges on the basis of its book figures (O.R. II, 886-93). Its witness on the depreciation expense in 1929 was Mr. Hale, President of Appellee in 1932. He then testified in its behalf on depreciation expense as follows:

> "The objective of depreciation is to determine the amount of dollars per year which must be accumulated so that at the end of the life of the property now in service you would have accumulated an amount equal to its original cost" (O.R. II, 888).

This testimony was in the face of the decision in *Michigan Public Utilities Commission* v. *Michigan State Tel. Co.*, 228 Mich. 658, at 673 (1924); in *Cincinnati & Suburban Bell Tel. Co.* v. *Public Utilities Commission*, 148 N. E. 817, at 824 (Ohio, 1925); and in *Kansas* v. *Southwestern Bell Tel. Co.*, 115 Kan. 236, at 254, 292-94 (1924).

Appellee in 1932 repudiates the position it has taken in the regular course of its business in relation to its investors, who receive its annual reports based on its books, the Interstate Commerce Commission, with whom it files annual reports, since the decision of this Court in the *United Railways* Case. On the basis of its position its books have not and do not now record the true facts.

DISCUSSION AS TO CONTENTION NUMBERED V.

V.

THE DISTRICT COURT COULD NOT MAKE A VALID FINDING ON DEPRECIATION EXPENSE CHARGES ON THE BASIS OF THE EXPERIENCE OF OTHER ASSOCIATED COMPANIES IN RESPECT TO DEPRECIATION EXPENSE CHARGES AS DISCLOSED IN THE RECORD.

Appellee presented exhibits showing comparisons of what the depreciation expense charges of each of the other Associated Companies actually were on a company basis and what it would have been if each such company had used the rates used by Appellee in the Chicago area (R. V, 2982a-2987). Appellee also made a comparison between the rates for Chicago and New York City (R. V, 3144a; R. II, 1393).

These comparisons showed that for the entire period 1923 to 1931 the average depreciation rates of all the other Associated Companies, taken as a whole, were slightly higher than the Chicago rates; that of the individual companies, twelve had in effect rates as high as or higher than, and eight had in effect rates lower than, those in effect in Chicago; that the rates of the companies operating in territory including Washington, D. C., Cincinnati and Los Angeles were in each case as high as or higher than the Chicago rates; and that the rates for New York City for the three years 1929, 1930 and 1931 (the only years during which separate rates were applied in New York City) were substantially higher than the Chi-

cago rates (R. IV-V, 2982a-2987; R. V, 3144a; R. II, 1185-7; 1392-3).

The District Court's findings, giving effect to this presentation, are fatally defective because:

(1) The practice of recovering through telephone service advance collections applicable to additions to buildings and central office equipment is generally followed in the Bell System (R. II, 1181, 1201). If such advance collections are not proper operating expenses in this case, as Appellants contend, certainly the charges of such other companies are improper. But even if such charges are proper operating expenses, the amounts thereof depend on the particular conditions in the community which will determine the time and rate of *growth* in the far distant future and on the judgment of the depreciation expert, to the fullest extent prior to 1928 (R. II, 1201-2) and to a large extent thereafter (*supra*, 404). Appellee's presentation must be on the basis either that growth in each community in the Bell System forty or fifty years hence will be similar, or that some mathematical law exists which will flatten out the dissimilarities into an *average* which will bear a fair relation to the then situation in Chicago in particular.

(2) The comparison between depreciation rates in Chicago with those covering total company territory is meaningless. Appellee's witnesses on depreciation expense charges have testified that the following factors have probative value in making a comparison between Appellee's rates in Chicago and those of other communities:

(a) Growth, increase in population, in business and in new customers (R. II, 1099);

(b) New subscribers, additional facilities to existing subscribers, increase in calling rates and holding

time, gradual extension of residences and business into vacant areas within the city (R. II, 1100);

(c) Judgment enters as a factor into average service life figures (R. II, 1123);

(d) Maintenance policy, major changes in accounting methods; gross additions and retirements of property (R. II, 1124);

(e) Prospective growth in plant, number of stations calling rates from provisional estimates and fundamental plans; future additions of buildings and central office equipment (R. II, 1125);

(f) Accounting methods as to extraordinary repairs, the fact as to whether the property is new or second-hand, wear and tear not covered by current repairs, obsolescence and inadequacy resulting from physical age, supersession by new inventions and discoveries, changes in popular demand and public requirements (R. II, 1126);

(g) Rate of growth and retirement; history of each company as to the purchase of going plant, the condition at which it was entered on the books and the amount of depreciation reserve which was set up on the books with respect to such purchases; growths of the depreciation reserve and net charges to the depreciation reserve by primary plant accounts for each year; extent to which other companies took into account the fact that on account of the depression there would be a deferment in future additions; the varying amounts of investment in central office equipment, such as manual and dial, central office buildings, manual and dial; the policy of each of the other companies in respect to the re-use of its own equipment and material (R. II, 1202).

More than mere judicial notice is required to prove that rates applicable to a metropolitan area like Chicago would bear relation to the composite rate of other Associated Companies like the Mountain States Tel. & Tel. Co. which covers only mountainous rural territory and small cities, the largest of which, according to the United States 1930 Census, are Denver, Colo. (pop. 288,000), Salt Lake City, Utah (140,000), and El Paso, Texas (102,000). More than mere judicial notice is required to prove that the rates applicable to Chicago alone would bear relation to the composite rate of the New York Telephone Company covering New York City and its other areas combined.

(3) The difference in the business and financial sections of Chicago and New York City and the existence of the subway in the one and not in the other are sufficient to vary the characteristics surrounding their depreciation requirements if considered on a city basis only.

(4) This Court's direction of December 1, 1930, required that "careful analysis" be made of the Bell System situations which were employed as the basis for comparison covering depreciation of expense charges (282 U. S. 133, at 158). Appellee not only did not present such analysis but resisted Appellants' attempt so to do. One of the sources from which knowledge of the facts bearing on Bell System depreciation rates may be obtained, is the Provisional Estimates (R. H, 1954-8) of the Associated Companies, which form the basis for policy determinations within the Bell System (*infra*, 504).

On September 21, 1931 (R. IX, 5033-4), Appellee refused Appellants' request for the Provisional Estimates of the Associated Companies made by Appellants' counsel on July 28, 1931 (R. IX, 5035); on January 11, 1932, during the taking of the depositions in New York,

it again refused Appellants' request for these documents (R. III, 2265). The final hearings commenced in February, 1932, and the Provisional Estimates were not produced by Appellee as part of its case or otherwise. The District Court refused to pass on Appellants' Motion of May 3, 1932, for their production (R. IX, 4973). They were finally made available on June 4, 1932 (R. II, 1944), twenty-seven days before the conclusion of the hearing. They consisted of sixteen volumes of tables of statistics, reports and letters, comprising between eight and ten thousand pages (R. VIII, 4802), and they contained material bearing on comparability or lack of comparability of conditions in one company as compared with another company respecting depreciation (R. II, 1960).

Proper study of these records, for the purpose of determining whether a fair comparison may be made between the depreciation expense charges of each of the other companies and that of Appellee in Chicago, was estimated to require from three to six months (R. II, 1960). From the cursory examination, it appears that there is a complete lack of comparability for that purpose between the conditions in Chicago and in other portions of the Bell System (R. II, 1961-3; R. VIII, 4437, 4438a, 4439, 4445).

But the Provisional Estimates did reveal the extent to which the depreciation expense charges in the other portions of the Bell System truly reflect the effect of the actual conditions existing in their respective territories. The letter from the President of the Bell Telephone Company of Pennsylvania, to the President of the American Telephone & Telegraph Company, dated November 27, 1922, relating to the Provisional Estimates of the former company for 1923 (R. II, 1948) said:

"The rate of depreciation has been assumed to be the present rate, 5.2 per cent. In our letter to Mr. Gherardi, dated May 27th, we recommended certain revisions in the depreciation rates, which would result in a reduction of approximately $300,000 for the year 1923. In his letter of October 2nd Mr. Gherardi concurred in these revised rates as reasonable and proper, and suggests that we take the matter up with Mr. Heiss before any actual changes were made. On October 17th Mr. Heiss expressed his approval of the changes in rates, but suggested that we do not adopt the new schedule pending the determination by the Interstate Commerce Commission of its policies. Under these circumstances, therefore, the 1923 provisional estimate provides for depreciation at the present filed rates. We can, however, be ready at any moment to adopt the new schedule upon receipt of advice from Mr. Heiss."

How many other Associated Companies were likewise waiting for the same advice and for how long a period the record does not show, nor was it possible to determine in the few crowded days of the hearings after the discovery of this situation. But it does appear that the final order of the Interstate Commerce Commission was not issued until 1931 (177 I. C. C. 351 (1931)).

DISCUSSION AS TO CONTENTION NUMBERED VI.

VI.

THE DISTRICT COURT COULD NOT MAKE A VALID FINDING ON DEPRECIATION EXPENSE CHARGES ON THE BASIS OF THE 1920 AND 1923 ORDERS ON DEPRECIATION, MADE APPLICABLE TO THE REPRODUCTION COST NEW OF APPELLEE'S PROPERTY.

The same principles which preclude a valid finding on the basis of the recorded depreciation expense charges

made applicable to the reproduction cost estimates of Appellee's property, preclude also a valid finding on the basis of making applicable the Commission's depreciation expense allowances to such reproduction cost new estimates (*supra*, 433).

DISCUSSION AS TO CONTENTION NUMBERED VII.

VII.

ON THE BASIS OF THE DISTRICT COURT'S FINDINGS ON DEPRECIATION EXPENSE CHARGES, IT IS IMPOSSIBLE TO DETERMINE THE EXTENT TO WHICH THEY ARE BASED ON ANY ONE OR MORE OF THE CLASSES OF EVIDENCE TO WHICH IT CLAIMED IT GAVE CONSIDERATION.

Although the District Court's depreciation allowance was less than the recorded depreciation expense charges, it can not be said that such deduction took into account the advance collections. The amount thereof can not be determined from the record. Such deduction may have been intended to remove the inflation in such recorded charges through other errors which Appellants showed to exist therein (R. III, 2431-32). How much more the reduction would have been, in any event, had the factor of reproduction cost new estimate not entered into its consideration, it is impossible to tell.

Under Fair Return (*infra*, 467) Appellants treat the advance collections as an advantage of additional pecuniary profit to Appellee's investors which is not received by the ordinary investor on his investment in business undertakings outside the Bell System.

FAIR RETURN.

PRELIMINARY STATEMENT.

What the District Court Did.

The District Court found that the rates in suit were confiscatory for each of the years under investigation and at the date of the Decree, June 28, 1933 (R. III, 2524). It enjoined the enforcement of the attacked rates and held that Appellee was entitled to retain the amounts collected by it during the period of the litigation in excess of the sums chargeable under the attacked order—which amounts aggregate, to December 31, 1931, $17,000,000, exclusive of interest (R. VII, 4082). The record was closed on July 1, 1932 (R. II, 2052, 2102).

The District Court found the following rates of return from Appellee's Chicago intrastate business under the existing rates, and under the rates in suit, and the required minimum rate of return to avoid confiscation all related to the rate base value as found by it (R. III, 2521-2):

	Under Existing Rates	Under Rates in Suit	Required Minimum Rate of Return
1923	5.4%	4.1%	7½%
1924	5.5	4.4	7½
1925	5.3	4.2	7½
1926	5.3	4.2	7½
1927	5.0	4.0	7½
1928	5.0	4.0	7
1929	5.8	4.9	7
1930	5.3	4.5	7
1931	5.5	4.7	6½
1932	4.8	4.1	5½

In its findings of the required minimum rate of return, the District Court applied the "comparative return" test of compensatory rates set forth originally in *Willcox* v. *Consolidated Gas Co.* (212 U. S. 19, at 48, 49 (1909)), using therein the claimed experience of business undertakings outside the Bell System (R. III, 2514). The District Court did not apply the "comparative return" test using therein the experience of the Associated Companies within the Bell System; nor did the District Court apply the "attraction of capital and maintenance of credit" test of compensatory rates of *Bluefield Water Works, etc.* v. *Commission* (262 U. S. 679, at 693 (1923)).

It stated that its findings for 1931 and 1932 gave weight to "the general decline in corporate earnings" during those years; that in its findings on fair return it gave effect to the consideration that in times of great prosperity a utility having the advantages of Appellee was not entitled to the large earnings made by many undertakings and that in times of business adversity its return "should not be reduced to the extent that the earnings of many private corporations have been impaired." (R. III, 2514.)

The District Court's findings of required minimum rate of return for each year under investigation represented a prognostication for such year as the basis for future action and did not represent a determination of the inadequacy of the attacked rates during each of such years on the basis of Appellee's actual experience of such year. Appellee's showing was directed to such prognostication, Appellants' to such actual experience.

Appellee's Showing.

Appellee's showing of required minimum rate of return was 8% on the rate base for rate-making purposes for the

years 1923 to 1927, inclusive, 7% for the years 1928 to 1930, inclusive, and for the first part of 1931, and 8% thereafter (R. I, 160). Appellee's prognostication assumed that:

(1) Appellee's operations and financing would be as an independent entity apart from the Bell System, or if considered a part thereof, Appellee would receive no benefit therefrom by way of reduction in rate of return required in the assumed financing (R. I, 205, 202-4);

(2) Such financing contemplated the sale of Appellee's securities to underwriters for resale to provide funds sufficient to build or to buy Appellee outright at the rate base value (R. I, 193-4);

(3) The required return on such funds would be represented by "net cash income available for return" and would exclude any advantages of additional pecuniary profit to the underwriters or investors from Appellee (R. I, 194);

(4) Such required return so determined would be equal to that received in underwritings of similar character covering other business undertakings of corresponding risks and uncertainties (R. I, 194); and

(5) The prognosticated rate of return so determined represented such "generally received" rate of return, as determined by

(a) the unsupported general statements of witnesses (R. I, 199-200) and

(b) the percentage resulting from the American Company's average carrying charges related to its own average outstanding credit and capital obligations plus surplus. Such percentage for the years 1923 to 1927, inclusive, ranged from 6.83% to 6.93%; for the period 1928 to 1930 ranged from 6.25% to 6.55%; and for the year 1931 was 6.42% (R. IV, 2944).

Appellants' Showing.

Appellants offered the actual financial and financing experience of Appellee during the period under investigation under the recorded net income produced by the existing rates; the reduction, if any, in such recorded net income estimated to be produced by the attacked rates; and the comparable actual financial and financing experience of the other Associated Companies under returns which were not in excess of such reduced net income.

Appellants' Position.

Appellants' position is:

(1) Under the tests which the District Court failed to apply—the "attraction of capital and maintenance of credit" test, and the "comparative return" test based upon the experience of the Associated Companies of the Bell System (*supra*, 450) the attacked rates are clearly compensatory in each year of the litigation and at the date of the District Court's final decree; and

(2) The District Court's findings that the attacked rates are not compensatory on the basis of the comparative return test of the *Willcox* Case but using therein the claimed experience outside the Bell System, are fatally defective. The conclusion as to such outside experience, based on judicial notice and unsupported general statements covering the intricate and complex field of post-war corporate finance should not be accepted as adequate proof to sustain a finding of confiscation. The application to Appellee of such experience gives no effect to the difference between the character of return to Appellee's investors created by the District Court's findings on Separation of

Revenues, License Contract, Depreciation Expense and Western, and the return to the ordinary investor in business undertakings outside the Bell System.

In support of their position, Appellants offer the following:

SUMMARY STATEMENT OF APPELLANTS' CONTENTIONS.

I. Appellee's recorded return from its Chicago Intrastate business under the existing rates for each year of the litigation without giving effect to the District Court's adjustments thereto, was *more than* the required minimum return to avoid confiscation.

A. The issue of the constitutional inadequacy of the attacked rates must be determined by viewing the expected experience under the attacked rates in relation to Appellee's actual experience under the existing rates.

B. Appellee's position taken in its pleadings before the Commission and District Court and its course of conduct during the period of the litigation prove conclusively that the Recorded Return from its Chicago Intrastate business under the existing rates was constitutionally adequate during each year thereof.

C. Appellee's actual experience under the existing rates during the period of the litigation proves conclusively that Appellee's Recorded Return from its Chicago intrastate business under the existing rates, without giving effect to the District Court's adjustments thereto, in each of the years thereof was more than the required minimum to avoid confiscation.

II. The reduction in Appellee's recorded return from its Chicago Intrastate business under the existing rates

which would have resulted if the attacked rates had been in effect, would not have caused confiscation in any of the years of the litigation.

A. The net income available for return under the attacked rates as found by the District Court is compensatory for each year of the litigation.

B. The net income available for return under the attacked rates as found by the District Court, but adjusted to give effect to Appellants' adjustments, is compensatory for each year of the litigation.

III. The District Court's finding of the required minimum return to avoid confiscation produced fantastic results when applied to Appellee's actual experience during the period under investigation.

IV. The District Court's use of the investment experience outside the Bell System in its application to Appellee of the comparative return test of compensatory rates of the *Willcox* Case was fatally defective.

A. Unsupported general statements or judicial notice covering post-war returns on corporate investments outside the Bell System should not be accepted as adequate proof in support of a finding of confiscation.

B. Unsupported general statements or judicial notice covering returns on investments of corporations outside the Bell System whose entire property values are represented by outstanding securities should not be accepted in support of a finding of confiscation.

C. The application of the returns on corporate investments outside the Bell System to test the inadequacy of Appellee's return to its investors from the attacked rates, as found by the District Court, disregards the special character of the return to Appellee's investors resulting from

the District Court's findings on Separation of Revenues, License Contract Payments, Depreciation Expense and Western.

V. Appellee's showing of the percentage resulting from the American Company's average carrying charges related to average outstanding credit and capital obligations plus surplus cannot be used to support the District Court's findings of the required minimum rate of return and on the inadequacy of the attacked rates.

DISCUSSION AS TO CONTENTION NUMBERED I.

I.

APPELLEE'S RECORDED RETURN FROM ITS CHICAGO INTRASTATE BUSINESS UNDER THE EXISTING RATES FOR EACH YEAR OF THE LITIGATION, WITHOUT GIVING EFFECT TO THE DISTRICT COURT'S ADJUSTMENTS THERETO, WAS MORE THAN THE REQUIRED MINIMUM RETURN TO AVOID CONFISCATION.

A.

The issue of the constitutional inadequacy of the attacked rates must be determined by viewing the expected experience under the attacked rates in relation to Appellee's actual experience under the existing rates.

During the entire period of the litigation, Appellee functioned under rates prescribed by the Commission's order of December 20, 1920, and maintained in force from 1923 to date by the injunctions of the District Court. The recorded net cash income available for return from Ap-

pellee's Chicago Intrastate business under the existing rates was from $2,330,000 to $5,224,000 less per year than the corresponding prognosticated minimum cash return to avoid confiscation as found by the District Court, the aggregate shortage for the period 1923 to 1932, inclusive, being in excess of $37,000,000. The yearly rate of return produced by such recorded net cash income available for return related to the District Court's finding of rate base, equalled from 4.09% to 5.56%, or from 58.27% to 79.43% of the prognosticated required minimum rate of return, as found by the District Court (Appendix, p. 118).

The District Court's finding of the Chicago Intrastate net cash income available for return from the existing rates exceeded by from $445,000 to $1,200,000 per year the corresponding recorded figures during each year under investigation. Such excess aggregated for the period, 1923 to 1932, inclusive, more than $9,200,000 (Appendix, p. 119). Such increase in recorded net income resulted from the District Court's adjustments on Depreciation Expense (*supra,* 378), License Payment (*supra,* 84), and Maintenance (Appendix, p. 128) and are herein referred to as the "District Court's adjustments."

The District Court found that the reduction in Chicago intrastate net cash income which would have resulted if the attacked rates had been in effect during the same period ranged from $1,270,000 to $1,740,000 per annum, aggregating for the period $15,800,000 (Appendix, p. 120).*

Giving effect to the District Court's adjustments which increased the recorded net cash return under the existing rates, the net reduction in recorded cash return which

*The reduction in annual telephone service charges by the attacked rates for the period 1923 to 1931, inclusive, ranged from $1,600,000 to $2,200,000, and aggregated over $17,000,000 (R. VII, 4082). No corresponding figures are available for 1932.

would have resulted if the attacked rates had been in effect during the same period ranged from $450,000 to $650,000 per year in the period 1923 to 1927, inclusive, was $1,200,000 in each of the years 1928 and 1929, $890,000 in 1930, $220,000 in 1931, and $71,300 in 1932, aggregating for the period $6,500,000 (Appendix, p. 121).

The District Court found that the attacked rates were confiscatory. It made no express finding on the constitutional adequacy or inadequacy of the existing rates. If Appellee's existing rates are confiscatory, Appellee's actual experience, and not the experience of other business undertakings, determines the issue of the constitutional inadequacy of the attacked rates. If Appellee's existing rates are not confiscatory, certainly the prognosticated required minimum cash return as found by the District Court in excess of the recorded net cash return under the existing rates, would be the wrong standard by which to determine the issue of the constitutional inadequacy of the attacked rates.

On the basis of the District Court's determination of the issue of Fair Return, its findings of the rate of return realized from the existing rates have no significance whatsoever, although this Court's direction gave special significance thereto. This Court in its Opinion of December 1, 1930 (282 U. S. 133, 161) stated:

> "The record of the Illinois Company shows that for many years it has been able to expand its business so as to meet increasing demands, to pay its operating expenses, including interest on money borrowed, to pay dividends of eight per cent upon its capital stock, and to accumulate a surplus. It was found by the court that the reduction in revenue caused by the rates in question, as applied to the entire business for the year 1923, would amount to about $1,700,000, and the question is whether the loss when ascertained with re-

spect to the intrastate business would cause confiscation under the applicable standard as above set forth in the *Bluefield* case, *supra*. In order to determine this question, the court should find the rate of return which was realized from the intrastate business and the rate of return which it is fair to conclude would have been realized from that business under the prescribed rates."

B.

Appellee's position taken in its pleadings before the Commission and District Court and its course of conduct during the period of the litigation prove conclusively that the Recorded Return from its Chicago Intrastate business under the existing rates was constitutionally adequate during each year thereof.

The existing rates were prescribed by the Commission's order of December 20, 1920, which granted a portion of the increase in rates which Appellee sought by petition before the Public Utilities Commission in a proceeding commenced by Appellee in 1919 (O.R. IV, 1305). With Appellee's consent, the rate base was established by the Commission to include the fixed plant valued at the *original cost* on July 31, 1919, *less the full amount of the depreciation reserve account*, although Appellee showed and the Commission found that the reproduction cost new of such fixed plant on that date was 46.6% higher than its original cost.* The rates were measured to produce a return of 7.9% on the rate base as of July 31, 1919, without giving effect to additions to plant from that date to December 31, 1920, aggregating $7,273,820 (R. VII, 4072A; OR. IV, 1287). Obviously, if the rate base had included such property and

*Original cost $65,611,820.
Reproduction cost 7/31/1919, $96,178,733 (O.R. IV, 1287).

had been calculated on the basis used by the District Court in the instant case, the 7.9% return would have been reduced to 4.84% or less (Appendix, p. 121-3).

Appellee accepted the 1920 Order, and has continued to function under its prescribed rates from its effective date to the present time, under the protection of the injunctions issued by the District Court (O.R. I, 189, *Smith* Case, *supra*, at 162; R. III, 2485). Appellee has taken no steps to have increased the rates prescribed by the 1920 Order, although under the Illinois Commerce Commission Act it had a right so to do at any time after two years from the effective date of such Order, to-wit: January 1, 1921 (O.R. I, 114). On the contrary, Appellee voluntarily reduced its Intrastate toll rates on February 1, 1929, by an estimated amount of $62,000 per year and on January 1, 1930, by an estimated yearly amount of $262,000 (R. VIII, 4509-10). These reductions were made in the face of the fact that the net income available for return from such business was confiscatory on the basis of the standard applied by the District Court (Appendix, p. 124).

Similarly, Appellee voluntarily reduced its showing, as recorded on its books, of return from existing rates, for the period 1923 to 1929, inclusive, by increasing its yearly operating expenses, through the charge thereto of depreciation expense ranging from $1,398,326 to $2,096,461 (R. VII, 4072A) in excess of the charge allowed by the 1920 Order, such excess aggregating for the seven years $12,387,424, and through the charge thereto of License Contract payments for the period 1923 to 1927, inclusive, ranging from $223,248 to $387,285 (R. IV, 2734; R. VI, 4030s; O.R. IV, 1302) in excess of the charge allowed by the same

Order, and aggregating for the seven-year period $1,557,744.*

The Commission issued a Citation on September 13, 1921, to Appellee to show cause why the rates prescribed by the 1920 Order "*should not be reduced*" because these rates were granted "under excessively high operating conditions," whereas the Commission believed that operating conditions at the time of the citation were lower than when the 1920 Order was issued (O.R. I, 10).

In its Answer filed thereafter, Appellee alleged:

> "That the rates and charges of respondent (Appellee), referred to in said order and citation, were authorized and approved as just and reasonable by an order of the Public Utilities Commission of Illinois (predecessor of this Commission) entered on the 20th day of December, 1920, after an extensive investigation by said Commission, in a proceeding before it known as Docket No. 9291, in which respondent filed with said Commission certain schedules of rates for its approval; that said order of said Commission finding such rates and charges just and reasonable has not been reversed or set aside and now remains in full force and effect" (O.R. I, 11-12). "Respondent (Appellee) avers that its rates and charges heretofore approved and authorized by the aforesaid order of the Public Utilities Commission of Illinois, entered on December 20, 1920, and now in full force and effect, are just and reasonable, and that the burden of proof is upon whomsoever avers, or seeks to show, that said rates are unjust and unreasonable" (O.R. I, 13).

In the Bill of Complaint filed on September 20, 1923 (O.R. I, 1), before the District Court to enjoin the attacked rates, Appellee alleged:

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*Corresponding figures for the year 1932 are not available (R, IV, 2742).

"*Tenth.*

"That the Illinois Commerce Commission, under the laws of the State of Illinois, had no authority to prescribe rates to be charged by the plaintiff (Appellee) in lieu of the present rates of the plaintiff (Appellee) except upon a valid finding that the said present rates are unjust, unreasonable, discriminatory or preferential, or in anywise in violation of any provisions of law; that the finding of said Illinois Commerce Commission in said order of August 16, 1923, that the present rates of the plaintiff (Appellee) are unjust and unreasonable is void, as appears from said finding, and that the rates therein prescribed are therefore contrary to law and void * * *" (O.R.I, 7).

The Bill of Complaint has never been amended. The Appellee has not by any other or additional pleadings in the instant case or otherwise attacked the rates prescribed by the 1920 Order as unreasonable or as constitutionally inadequate.

C.

Appellee's actual experience under the existing rates during the period of the litigation proves conclusively that Appellee's Recorded Return from its Chicago Intrastate business under the existing rates without giving effect to the District Court's adjustments thereto, in each of the years thereof, was more than the required minimum to avoid confiscation.

PERIOD 1923-1929, INCLUSIVE.

Appellee's financial history during the period 1923 to 1929, inclusive, proves conclusively the sufficiency of the Chicago Intrastate recorded return to "assure confidence in the financial soundness of the utility," and the adequacy of such recorded return "to enable it to raise money nec-

essary for the proper discharge of its public duties." (*Bluefield Water Works Improvement Co.* v. *Pub. Serv. Com. of Va.*, 262 U. S. 679; *Los Angeles Gas & Elect. Co.* v. *R. R. Com.*, 77 L. Ed. 820; *Smith* v. *Illinois Bell Telephone Co.*, 282 U. S. 133; *United Rys.* v. *West*, 280 U. S. 234.)

Appellee's Stock Investors.

On December 31, 1922, Appellee had outstanding $60,000,000 capital stock, of which $37,700,000 (R. V, 3083) capital stock was allocable to its Chicago Intrastate business. Appellee's stockholders purchased $10,000,000 of capital stock in each of the years 1924 and 1925, $30,000,000 in 1927, and paid on installment subscriptions $20,000,000 in 1929; of which the American Company's share is $69,531,400 (Appendix, p. 125). $43,301,413 of such issued stock and installments is allocable to Chicago Intrastate business, and the American Company's share thereof is $43,012,124 (Appendix, p. 125).

Appellee received par* for its stock (including a proportionate share of surplus and unrecorded values, if any, resulting from revaluation of assets and from going value). During each of the seven years Appellee's Chicago Intrastate business paid from current earnings 8% cash dividends on outstanding stock including $31,220,000 capital stock sold at par and carried to surplus amounts ranging from $683,800 to $2,327,000 per year, aggregating for the entire seven-year period $8,729,789 (Appendix, p. 126). Such accumulated surplus was over three times Appellee's Chicago Intrastate surplus ($2,491,215) on December 31, 1922 (O.R. VI, 2120b; R. V, 3083).

*The only premiums on stock sales were $522 for 29 shares in 1925 and $735 for 49 shares in 1927 (R. VIII, 4815).

The recorded net cash income available for return under the existing rates—without giving effect to the District Court's adjustments thereto, aggregating $6,156,712—was sufficient to enable Appellee to pay interest and amortization on money borrowed, 8% interest on installments and to yield to Appellee's stockholders, on their equity investment allocable to Appellee's Chicago Intrastate business, the following rate of return, expressed as a percentage of return on average outstanding capital and on average outstanding capital and surplus including therein the $31,220,000 capital stock applicable thereto and sold by Appellee at par:*

Year	Rate of Return on Average Capital Stock	Rate of Return on Average Capital Stock and Surplus
1923	10.95%	10.05%
1924	10.86	9.88
1925	11.25	10.03
1926	10.25	9.10
1927	9.26	8.10
1928	9.22	8.10
1929	11.50	9.81

Such rate of return is more than the rate which Appellee's witnesses testified would be sufficient to permit it to attract equity capital and to maintain its credit and stability of outstanding securities (R. I, 209). On the authority of the *United Railways* Case and the *Wabash Valley Electric* Case such cash return—as the entire return to Appellee's investors—would be compensatory.

The important thing to note, however, is that the above rate of return in each year is not the entire return to Appellee's investors. It is only a portion thereof. Thus:

*The table in the text is taken from the following sources: R. II, 1395-1403; R. IV, 2734-40, 2748-56, 2968, 2973; R. V, 3083-9; R. VII, 4075, 4078; R. VIII, 4457-61, 4792-3.

Such rate of return was earned after absorbing, as operating expense, the expense of furnishing, as part of the return to the American Company as the equity investor in Appellee, the following nine advantages of additional pecuniary profit which were confirmed by the District Court's findings herein, and which are not available to or received by the ordinary investor in ordinary public utility or other business undertakings outside the Bell System:

(1) The receipt by the American Company of reimbursement from Appellee of the entire amount of the American Company's expense allocable to the latter as the Holding Company investor in the securities of Appellee of—

(a) distributing the American Company's own stocks and bonds offered by it to its own investors during the period 1923 to 1929, inclusive (*supra*, 174);

(b) servicing all of the American Company's securities outstanding in the hands of its investors during the same period, issued since 1886 through subscription by its stockholders or through underwriters (*supra*, 176);

(c) operating ten departments of the American Company, whose operations are concerned in whole or in part with the functions of the American Company as the Holding Company investor in the securities of the Associated Companies (*supra*, 184);

(2) The receipt by the American Company of substantial royalties and profits from the non-telephone field and from the telephone field outside the Bell System for the use therein of patents and inventions, the expense of development of which was charged as an operating expense of the Associated Companies (*supra*, 97, 106);

(3) The free use of the Chicago exchange plant facilities in the interstate services of the American Company, the expenses of which use Appellee reimbursed itself by allocating to the interstate toll services substantial portions of the intrastate exchange service revenues each year (*supra*, 68);

(4) The use free of charge and without payment of adequate compensation, of Appellee's facilities and personnel to merchandise the American Company's stocks and bonds in Appellee's territory to the public and to Appellee's employes—the expenses of which use are charged by Appellee as part of Appellee's operating expenses (*supra* 218);

(5) The receipt by the American Company of unreasonably large returns on its investment in Long Lines ranging from 13½% to 19.7% on its capital and surplus invested therein during the years 1923 to 1929, inclusive (*supra*, 144), resulting in whole or in part from—

(a) the discriminatory allocation between that department and the Associated Companies, of the Bell System portion of development and research expense of the American Company charged to such companies as part of the license contract costs (*supra*, 126);

(b) the surrender by Appellee of its right under Section 10 of the Original License Contract of 1881 to participate in the receipts and profits of the long distance business transacted in Chicago; this advantage the American Company received from Appellee but not from the other Associated Companies (*supra*, 229);

(c) the construction and engineering of Appellee's plant to conform to the plan deemed advisable by the

American Company to enable it to furnish satisfactory and profitable long distance service (*supra*, 164);

(d) the transfer, with the consent of Appellee, of the allegiance of its employees to the American Company as the operator of the long distance service (*supra*, 224);

(e) the right granted by Appellee to the American Company to settle all questions of policy and operation of Appellee on any question that might affect any other Company in the Bell System in which the American Company is also an investor or that might affect the long distance service of which the American Company was the operator (O.R. VI, 2077-8).

(6) The receipt by the American Company from Western of

(a) substantial royalties as consideration for the franchise to the latter to sell its manufactures to Appellee (*supra*, 167);

(b) unreasonably large returns on the American Company's investment in Western resulting from such manufactures—the American Company as the investor in Appellee providing capital to purchase such manufactures and acting at the same time as the purchasing agent for Appellee and as selling agent for Western (*supra*, 169; O.R. III, 1120; O.R. VI, 2196);

(c) unreasonably large returns on its investment in Western allocable to non-Bell business resulting from the arbitrary separation of expenses and property between the Bell and non-Bell business and from the failure to allocate to the non-Bell business its proper portion of Western's Development and Research expense (*supra*, 247, 271).

(7) The use in 1923 and thereafter of Appellee's resources and credit—

(a) to liquidate to the American Company $13,800,000 long-past-due indebtedness of the Central Union Telephone Company, which had been impaired and which could not be liquidated upon the credit of the latter;

(b) to permit the American Company to withdraw in cash as a profit $3,700,000 from the sale of the Central Union properties in Illinois to Appellee; and

(c) to finance, beginning with 1923, the Central Union properties in Illinois in lieu of using the American Company's credit, theretofore for many years the sole credit for that purpose (*supra,* 224).

(8) The receipt by the American Company of:

(a) the excess of license payment over the amount found by the District Court properly chargeable as an operating expense (*supra,* 84);

(b) more than $725,000 profit on its transfer to Appellee of telephone instruments on December 31, 1927, representing Appellee's Chicago intrastate portion of the $14,395,799 profit made by the American Company in its transfer of telephone instruments to the Associated Companies on that date (*supra,* 231).

(9) The use of the large fund and the accumulated earnings thereon, of advance contributions for anticipated depreciation on contemplated future investments of capital:

(a) to provide and make available additional earnings and assets to meet the current interest and dividend requirements on Appellee's credit and capital obligations;

(b) to meet the maturing principal of Appellee's outstanding credit obligations; and

(c) to increase the equity behind its outstanding capital obligations (*supra,* 414).

Such cash rate of return and nine advantages of additional pecuniary profit were earned for the American Company, as Appellee's equity investor, who also enjoyed the following four advantages of additional security which were confirmed by the District Court and which are not enjoyed by the ordinary investor in the ordinary public utility or other business undertaking outside the Bell System:

(1) The specification by the American Company, as the investor in Appellee, what new inventions, discoveries and improvements in the art should be woven into the plant of Appellee to protect the American Company's investment against impairment through failure to keep abreast or ahead of the art (*supra,* 170).

(2) The security of investment resulting from the insurance by the American Company at the expense of Appellee, as found by the District Court, against patent infringement liability in the use of Appellee's property in which the American Company is the principal investor (*supra,* 209).

(3) The joinder of Appellee's employees and the employes of the other Associated Companies, of the Long Lines, and of Western, under a plan where the American Company as principal investor in each of them can shift experienced personnel from one section of the country to the other as it sees fit, to protect its interests wherever situated, to strengthen the organization wherever necessary (*supra,* 219, 222).

(4) The use of the large fund and the accumulated earnings thereon, of advance contributions for anticipated depreciation on contemplated future investments of capital:

(a) to increase the security for Appellee's outstanding credit obligations and to increase the equity behind its outstanding capital obligations;

(b) to improve Appellee's earning record in its relation to its capital investors; and,

(c) to provide a large portion of Appellee's capital funds employed in the telephone service from the telephone users, as involuntary investors without their right of interest therein, in lieu of raising such funds through the issue of securities to its capital investors (*supra,* 413).

At this point Appellants direct attention to the consideration that only Appellee's *equity investors* receive the first eight advantages of *additional pecuniary profit* and the first three advantages of additional security enumerated above. For that reason, if for none other, the determination of the issue of Fair Return must view the situation on the basis of return to the *different classes of Appellee's investors* considered separately, and not to all *classes* of investors considered as a unit. To that extent is the instant case distinguishable in treatment from that ordinarily made in respect to that issue.

The significance of these advantages of additional pecuniary profit and additional security, confirmed by the District Court's findings on Revenues and Expenses, on the issue of the inadequacy of the cash return is determinable either by viewing them as additional returns whose measure in dollars cannot be definitely ascertained, and for that reason the inadequacy of such cash return cannot be proved by Appellee (*Chesapeake & Potomac Tel. Co.* v. *Whitman,* 3 Fed. (2d) 938; *Chesapeake & Potomac Tel. Co. of Virginia* v. *Comm. of Virginia,* 147 Va. 43); or by comparing the cash return plus these advantages produced by Appellee's operations with the comparable average cash return

plus advantages produced by the other Associated Companies from their operations, the return of the latter Companies not having been shown to be constitutionally inadequate.

Appellee and Other Associated Companies.

Comparison between Appellee's recorded return from its Chicago Intrastate business under the existing rates, without giving effect to the District Court's adjustments thereto, and the corresponding average return from the operations of the other Associated Companies proves conclusively that such recorded return was compensatory for each of the years 1923 to 1929, inclusive.

(1). The rate of return on average common stock and surplus of such companies and of Appellee's Chicago Intrastate business was:

	Other Associated Companies (R. VI, 4027; R. VII, 4362) (a)	Appellee (Supra, 463) (b)	Difference in Dollars (b—a) (c)*
1923.....	7.19%	10.05%	$1,177,496
1924.....	6.80%	9.88%	1,444,805
1925.....	7.59%	10.03%	1,207,483
1926.....	8.40%	9.10%	393,188
1927.....	8.44%	8.10%	211,048**
1928.....	8.72%	8.10%	480,696**
1929.....	8.71%	9.81%	857,660
Total			$4,388,888

*Col. (c)—Computed by applying per cents in columns (a) and (b) to Chicago Div. Intrastate portion of capital Stock and Surplus (R. V, 3084-5; R. VIII, 4457-61).

**Red.

On the basis of total company net earnings, the comparison between Appellee's rate of return and that of such other companies related to their respective capital and surplus is:

	Other Associated Companies (a)	Appellee (b)	Difference in Dollars (b)--(a) (c)
1923	7.19%	9.74%	$1,650,695
1924	6.80%	9.82%	2,223,116
1925	7.59%	9.44%	1,439,701
1926	8.40%	9.24%	752,420
1927	8.44%	9.28%	832,708
1928	8.72%	9.46%	924,592
1929	8.71%	10.19%	1,904,018
Total			$9,727,250

(2) In addition to the above excess cash return, Appellee's Chicago Intrastate business under the existing rates contributed to the American Company:

(a) in License payments the following amounts in excess of the average payment by the other Associated Companies (R. VII, 4064):

1923	$ 432,468
1924	501,857
1925	449,002
1926	348,971
1927	395,861
1928	127,511
1929	234,742
Total	$2,490,412

and

(b) in "the reasonable and suitable division of the tolls and profits of the long distance business" transacted in Chicago to which Appellee was entitled under Section 10 of the Original License Contract of 1881 and representing minimum contributions of from $260,000 to $508,000 a year during the period 1923 to 1929, inclusive, and aggregating for the period at least $2,532,000 (*supra*, 50). The other Associated Companies made no such contribution (*supra*, 66).

During the period 1923 to 1929, inclusive, the American Company increased its investment in the capital stock of the other Associated Companies by yearly additions ranging from $70,000,000 to $150,000,000 and aggregating for the period more than $850,000,000, which increase was $260,000,000 more than the American Company's entire stockholdings in them on December 31, 1922 (Appendix p. 134). Obviously the American Company could not and would not more than double its investment in such companies through regular yearly additions during the seven-year period unless the yearly return thereon were adequate. In the absence of a showing that the average cash net earnings from the operations of the Associated Companies are inadequate, no issue of confiscation can arise as to the cash net earnings from the operations of Appellee so long as Appellee's showing is as good or is better than such average, after having absorbed as operating expense the costs of the advantages of additional profit and additional security equal to that of the other Associated Companies (*infra*, 535).

Appellee's Bond Investors.

Appellee's financial and financing experience with the general public is equally impressive.

Appellee has borrowed no money from banks since August, 1921 (O.R. VI, 2115); its current liabilities for money borrowed have been negligible (O.R. VI, 2120b; R. VIII, 4781, 4792-4).

Appellee's outstanding bonded debt during this period originated in the $50,000,000 bond issue sold in 1923, the proceeds of which were used to retire $19,000,000 maturing bonded indebtedness issued in 1909, to retire $15,000,000

purchase money notes of Appellee given for the purchase of the Central Union properties, and to provide $11,000,000 additional working capital (O.R. IV, 1578). $31,400,000 of such bonded indebtedness is allocable in 1923 to the Chicago Intrastate business (R. V, 3083 ratios).

The $50,000,000 bond issue was sold to J. P. Morgan & Co. in 1923 to cost* Appellee 5.53% (R. VII, 4260a). This cost was lower than the cost to:

(1) The American Company on its issue of $100,000,000 bonds in the same year; such cost being 5.95% (R. VII, 4260a);

(2) Eleven of twelve of the public utilities (other than Bell System companies) on their bond issues, aggregating $93,000,000, sold in the same year under authorization of public service commissions; such costs ranging from 5.77 per cent to 6.69 per cent (R. VII, 4285).

The yield on offering price** of Appellee's bonds in 1923 was 5.31 per cent (R. VII, 4260a). This yield was lower than the yield on offering price of:

(1) the American Company's $100,000,000 bonds sold to the public in the same year; such yield being 5.63 per cent (R. VII, 4260a);

(2) thirty-four of thirty-five public utility (other than Bell System) bond issues, aggregating $280,000,000 sold to the public in the same year; such yields ranging from 5.62 per cent to 7.00 per cent (R. VII, 4293-5).

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*The term "Cost" is the annual cost of money to issuing companies for the bond issues above defined, representing the interest and amortization of discount.

**The term "yield on offering price" is the annual yield to maturity to the purchaser of the above mentioned bonds and is based on the price paid by the first retail purchaser upon public offering of the bond issues by bankers.

The spread* on Appellee's bond issue in 1923 was .22 of one per cent (R. VII, 4260a). This spread was lower than the spread on:

(1) the American Company's bond issue of the same year; such spread being .32 of one per cent (R. VII, 4260a);

(2) eleven of twelve of the public utility (other than Bell System) bond issues, aggregating $93,000,000, sold in the same year under authorization of public service commissions; such spreads ranging from .26 of one per cent to .58 of one per cent (R. VII, 4285, 4293-5).

As bearing upon the stability of Appellee's bonds during the period subsequent to their original issue, the record shows:

(1) The yield on resale price** to the holder of Appellee's bonds was (R. VII, 4336a):

1923	5.36½%
1924	5.27%
1925	5.04%
1926	4.85½%
1927	4.72%
1928	4.70½%
1929	4.80½%

Such yield was lower during said years than the yield on resale price on:

(a) The American Company's bonds offered to the public in 1923 (R. VII, 4336a) and, in all but one of said years, the American Company's bonds offered to the public in 1925 (R. VII, 4336c),

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*The term "spread" is the difference between "cost" and "yield on offering price" representing the bankers' margin of profit or commissions.

**The term "yield on resale price" is the annual yield to maturity to the purchaser of the bonds on resale, the resale price used being the average of the high and low market price in the year of resale.

(b) 92 per cent of the number and 91 per cent of the amount, of public utility (other than Bell System) bond issues offered to the public in the years 1923-1929 and resold in open market in each of said years. (Appendix p. 137).

(2) Appellee's bonds were classified at the time of public offering and for two years thereafter as AA bonds, according to Moody's Ratings; thereafter in each of the years 1925 to 1929, inclusive, they were classified as AAA bonds (R. VII, 4336a). Moody's Ratings have come to have a significance to investors in the selection of their investments; AAA rating denotes the highest grade investment, attractive to the most conservative investor (R. I, 188).

Consider now the other Associated Companies' financial and financing experience with the general public under their lower cash return. The record shows that even their securities compare with the highest grade securities of other business undertakings. Thus:

During the period 1923 to 1929, inclusive, the cost to the other Associated Companies on their bond issues ranged from 5 per cent to 5.70 per cent (R. VII, 4260a). Such cost was lower during said years than the cost on 90 per cent of bond issues sold in corresponding years under authorization of public service commissions (Appendix, p. 138).

The spread on the bond issues of the other Associated Companies in the period 1923 to 1929, inclusive, was as follows: .22 of one per cent in 1923; .26 of one per cent in 1924; .19 of one per cent in 1925 and 1926; and .33 of one per cent in 1929 (R. VII, 4260a). These spreads were substantially lower than the spreads on the bond issues of public utilities sold in each of such years (except 1929),

under authorizations of public service commissions (R. VII, 4190a; Appendix, p. 147).

The yield on offering price on the bond issues of the other Associated Companies offered to the public during the period ranged from 4.83 per cent to 5.44 per cent (R. VII, 4260a). Such yield was lower than the yield on offering price of 93 per cent of the number (aggregating 226 bond issues) and 92 per cent of the amount (aggregating $2,458,000,000) of public utility bond issues sold in corresponding years during this period (Appendix, p. 139).

As bearing upon the stability of the bonds of the other Associated Companies, the record shows:

The average yield on resale price on their bonds offered during this period was (R. VII, 4336a-e):

1923	5.20%
1924	5.19%
1925	4.97%
1926	4.84%
1927	4.63%
1928	4.48%
1929	4.86%

Such yield was lower during said years than the yield on resale price on 95 per cent of the number and 92 per cent of the amount of public utility bond issues offered to the public in the years 1923 to 1929 and resold in open market in each of said years (Appendix, p. 140).

The bonds of the other Associated Companies were classified in the years 1923-1925 as AAA or AA, according to Moody's Ratings; and thereafter were classified as AAA bonds. Such rating denotes the highest grade investment, attractive to the most conservative investor (R. I, 188).

Stock of the five Associated Companies traded on exchanges during the years 1923-1929, inclusive, sold on low yields as follows (R. VII, 4232-4a):

	Average Yield on Resale Price of Stock of				
	Cin. & Sub. B. T. Company	New England T. & T. Company	Mountain States T. & T. Company	Pacific T. & T. Company	Southern New England T. & T. Company
1923	5.63	6.91½	6.73		6.22
1924	5.22½	7.54½	6.48		6.02
1925	4.75	5.48	6.33	5.73	5.62
1926	4.62	6.99	5.96	5.60½	5.31
1927	4.41	6.32	5.50	4.98	4.91
1928	4.00½	5.52½	5.11½	4.48½	4.78½
1929	3.88	5.25	4.92½	4.26	4.70

Appellee's Past Financial History.

Appellee's financial history from the date of its organization shows certainty and regularity of income for a long time prior to the period of litigation, a factor which this Court considered pertinent in the determination of Fair Return (*United Railways Case*, 280 U. S. 234, at 250 (1930)).

Appellee was organized and received its Original License Contract to conduct a telephone business on December 23, 1881 (O.R. VI, 1925). Its operations from that date to December 31, 1920, were confined to Chicago and suburban territory, with more than 79.41% of its investment in Chicago as of December 31, 1920 (R. VII, 4079).

Appellee's capital stock increased from $500,000 in 1881 to $60,000,000 on December 31, 1922 (Appendix, p. 126).

On its constantly increasing capitalization, Appellee paid the following cash and stock dividends:

	Cash Dividends (O.R. V, 1860)	Stock Dividends (O.R. VI, 2120)
1882 to 1892	20% to 51%	
1893 to 1899	12%	
1900	12%	16%—10,000 shares
1901	12%	
1902 to Oct., 1908	10%	
1908		25%—45,000 shares
1908 to 1923	8%	

It is significant that only two other Associated Companies paid an 8% cash dividend rate throughout the period from 1914 (Appendix, p. 136). With the exception of the years 1917 and 1918 (O.R. 2120b), Appellee's cash dividends were always paid from current earnings.

With the exception of 55,000 shares issued as stock dividends in 1900 and 1908 and premiums of $2911 (O.R. VI, 2120b), Appellee received *par* for its stock (including a proportionate share of surplus and unrecorded values, if any, resulting from revaluation of assets and from going value), although the open market price was substantially higher (O.R. VI, 2275).

In 1920, Appellee acquired the Central Union properties, which as already shown, had been in receivership from 1914 to 1919, had been operated at a loss for many years, and had not yielded returns sufficient to pay interest on indebtedness or return on its capital stock (*supra,* p. 224). Appellee's management and credit reversed this financial history and the Central Union properties thereafter were no longer a burden to the American Company; on the contrary they soon contributed their portion of the return necessary to sustain Appellee's sound financial position.

CONCLUSION.

If considered as the entire return, the recorded return under the existing rates, without giving effect to the District Court's adjustments thereto, was clearly compensatory for each of the years 1923 to 1929, inclusive. The recorded return was more than compensatory when considered in connection with the advantages of additional pecuniary profit and additional security confirmed by the District Court's findings on Revenues and Expenses for the benefit of Appellee's investors as part of the return on their investment.

1930.

On the basis of its recorded net income available for return—without giving effect to the District Court's adjustments thereto of $753,042—Appellee's Chicago intrastate business earned 8.83% per share of average outstanding stock, including therein $23,600,000 capital stock sold at par during the year, and 7.55% on outstanding capital and surplus applicable thereto; it paid an 8% cash dividend on outstanding stock including therein the $23,600,000 capital stock sold at par,* and carried to surplus $639,109 (R. IV, 2968; R. II, 1395-1403; R. V, 3083-90).**

Such rate of return in 1930 (on the basis of the District Court's finding of rate base value) was higher than that of any of the years 1923 to 1928, inclusive (Appendix, p. 118). Such cash return was earned, over and above the

*The dividend rate of the following Associated Companies was reduced in 1930 as follows: Chesapeake & Potomac Tel. Co. (W. Va.) from 6% to 4%; Michigan Bell Tel. Co., from 8% to 5%; Ohio Bell Tel. Co., from 7% to 6¼% (R. VI, 4026).

**Appellee earned its 8% cash dividend in 1931 on its entire capitalization and carried $816,907 to surplus (R. VIII, 4511).

advantages of additional pecuniary profit and additional security, enumerated above, which are received by the American Company as Appellee's equity investor, but which are not received by the ordinary investor outside the Bell System (*supra*, 464). The advantage of additional pecuniary profit received by the American Company under its long distance arrangement with Appellee and not received from the other Associated Companies, was greater in 1930 than in any of the years prior to 1929 (*supra*, 50, 66). Appellee's recorded cash return in 1930 was also after voluntarily increasing its operating expenses through the charge thereto of depreciation expenses which were $1,958,592 in excess of the charge allowed by the 1920 Order (R. V, 3145; R. IV, 2741; R. VII, 4070a-4071).

In 1930 Appellee sold at par $40,000,000 capital stock, of which $23,647,200 is allocable to Chicago Intrastate business (Appendix, p. 125). 99.15% (R. VI, 4025) of such stock was purchased by the American Company. Appellee did not issue bonds in 1930, but the bonds issued in 1923 continued to be rated as AAA and to sell on resale on a yield which was lower than the yield of such bonds on offering price (R. VII, 4336a). Appellee's bonds sold in 1930 to yield 4.67%, while the American Company's bonds issued in 1923 sold to yield 4.76%. The yield on resale price on Appellee's bonds was lower than the yield on resale price on 93 per cent of the number, and 91 per cent of the amount of public utility (other than Bell System) bond issues offered to the public in the years 1923-1930 and resold in open market in 1930 (Appendix, p. 141).

Appellee's unadjusted recorded return from its Chicago intrastate operations was $32,000 more than the average return of the other Associated Companies on their respective outstanding capital and surplus. On the basis of Ap-

pellee's total company net earnings, the return on its outstanding capital stock and surplus exceeded the average of the other Associated Companies in the year 1930 by $1,583,431.

In addition to such excess return, Appellee's license payment in 1930 exceeded the average of such companies by $195,999 (R. VII, 4063-4), and its contribution to the American Company—not made by them—through the long distance arrangement was at least $490,000 (R. VII, 4354a; *supra*, 50, 66, 471).

On the basis of their respective smaller returns, the other Associated Companies were able to attract more than $150,000,000 of capital from the American Company in 1930 through the sale of their stock at par; their bonds continued to be rated as AAA and to sell on resale on a yield which was lower than the yield of such bonds on offering price (R. VII, 4336a-e). The average yield on the resale price in 1930 of their bonds was 4.57 per cent (R. VII, 4336a-e). Such yield was lower than the yield on resale price on 95 per cent of the number and 94 per cent of the amount, of public utility bond issues offered to the public in the years 1923-1930 and resold in open market in 1930 (Appendix, p. 142).

Stock of the five Associated Companies traded on exchange in 1930 sold in the open market on yields ranging from 4.28% to 5.64½% (R. VII, 4232-4).

CONCLUSION.

If considered as the total return, the unadjusted recorded return under the existing rates was clearly compensatory for 1930; it was more than compensatory when considered in connection with the advantages of additional pe-

cuniary profit and additional security received by Appellee's investors as part of the return on their investment.

1931.

On the basis of its Chicago intrastate recorded net income available for return—without giving effect to the District Court's adjustments thereto of $1,204,976—Appellee earned 7.68% per share of average outstanding stock, and 6.65% on outstanding capital and surplus applicable thereto, and fell short of paying out of current earnings its 8% cash dividends of $6,963,434 by only $275,894 (R. IV, 2973; R. VII, 4077-9, 4075; R. VIII, 4506-4513; R. II, 1395-1403).* The rate of return in 1931 (on the basis of the District Court's finding of rate base value) was higher than that of any of the years 1923 to 1928, inclusive (Appendix, p. 118).

Such cash return was earned over and above the advantages of additional pecuniary profit and additional security, enumerated above, which are received by the American Company as Appellee's equity investor, and which are not received by the ordinary investor outside the Bell System (*supra,* 464). The advantage of additional pecuniary profit to the American Company through the long distance arrangement with Appellee, and not received from the other Associated Companies, was greater in 1931 than in any of the years prior to 1929 (*supra,* 50, 66, 471). Such cash return in 1931 was also after voluntarily increasing its operating expenses through the charge thereto of depreciation expense which was $2,018,960 (R. V, 3145; R.

*Appellee earned its 8% cash dividend in 1931 on its entire capitalization and carried $816,907 to surplus (R. VIII, 4506-4513). The dividend rate of the following Associated Companies was reduced in 1931: Michigan Bell Tel. Co., from 5% to 4% (Moody's Manual of Public Utilities, 1932, p. 134); Ohio Bell Tel. Co., from 6¼% to 6% (Moody's ibid, at 153).

VII, 4070a-1; R. IV, 2742) in excess of the charge allowed by the Illinois Commission's 1920 Order. The depression in 1931 increased for Appellee's investors the advantages of additional pecuniary profit in funds of advance contributions for anticipated depreciation in contemplated future additions (*supra*, 411).

In 1931 Appellee sold no stocks or bonds. The bonds issued in 1923 continued to be rated as AAA. The yield on resale price in 1931 to the holder of Appellee's bonds was 4.76½ per cent (R. VII, 4336a). This yield was lower than the yield on resale price in 1931 to the holder of:

(a) the American Company's $100,000,000 bonds sold to the public in 1923 (R. VII, 4336a);

(b) all of the ten public utility (other than Bell System) bond issues, aggregating $176,000,000 offered to the public in 1923 (R. VII, 4336f);

(c) twenty-six public utility (other than Bell System) bond issues, aggregating $225,000,000 of the twenty-eight aggregating $265,000,000 offered to the public in 1924 (R. VII, 4336g);

(d) twenty-seven public utility (other than Bell System) bond issues, aggregating $303,000,000 of the thirty aggregating $350,000,000 offered to the public in 1925 (R. VII, 4336h-i);

(e) the American Company's $125,000,000 bonds offered to the public in 1925 (R. VII, 4336c);

(f) fifty public utility (other than Bell System) bond issues, aggregating $657,000,000 of the fifty-four aggregating $700,000,000 offered to the public in 1926 (R. VII, 4336i);

(g) seventy-three public utility (other than Bell System) bond issues, aggregating $1,327,000,000 of the eighty-three

aggregating $1,566,000,000 offered to the public in 1927 (R. VII, 4336j-k);

(h) fifty-seven public utility (other than Bell System) bond issues, aggregating $775,000,000 of the sixty aggregating $845,000,000 offered to the public in 1928 and resold in open market in 1931 (R. VII, 4336l);

(i) thirty-one public utility (other than Bell System) bond issues, aggregating $404,000,000 of the thirty-two aggregating $428,000,000 offered to the public in 1929 (R. VII, 4336m);

(j) fifty-one public utility (other than Bell System) bond issues, aggregating $851,000,000 of the fifty-six aggregating $900,000,000 offered to the public in 1930 (R. VII, 4336m-n);

(k) the American Company's $150,000,000 bonds offered to the public in 1930 (R. VII, 4336e);

(l) twenty-six public utility (other than Bell System) bond issues aggregating $523,000,000 of the thirty-nine aggregating $847,000,000 offered to the public in 1931 (R. VII, 4336m-n).

Appellee's bonds in 1931 sold on a lower yield on resale than the yield on offering price. *The investor in 1931 who had purchased Appellee's bonds in 1923 could have sold his investment in 1931 at a profit.* Contrasted with this, more than 77 per cent of the amount of public utility bond issues offered to the public in the years 1923-1931 and resold in open market in 1931 sold on resale in 1931 on a yield which was higher than the yield on their offering price (Appendix, p. 143). Approximately 63 per cent of the amount of railroad and 87 per cent of the amount of industrial and other bond issues offered to the public in the years 1923-1931 and resold in open market in 1931 sold on resale in

1931 on a yield which was higher than their yield in offering price (R. VII, 4210a, 4249-50, 4259-60).

The record does not contain the earnings of the other Associated Companies. It does show, however, that Appellee's license payment exceeded the average payment of such companies by $226,361 (R. VII, 4063-4) and Appellee's contribution to the American Company—not made by them—through the long distance arrangement was at least $448,000. The bonds of the other Associated Companies continued to be rated AAA in 1931, and to sell on resale on a yield which was lower than the yield on such bonds on offering price (R. VII, 4336a-e). Contrast this with the experience of 77 per cent of the amount of public utilities, 63 per cent of the amount of railroads and 87 per cent of the amount of industrial bond issues offered to the public in the years 1923 to 1931 whose yield on resale price in 1931 was higher than the yield on public offering (*supra,* 484). Stock of the five Associated Companies traded on exchanges in 1931 sold in the open market on yields averaging from 5.86½% to 7.00½% (R. VII, 4232-4a).

1932.

On the basis of Appellee's estimate of Chicago intrastate recorded net earnings available for return, without giving effect to the District Court's adjustments thereto, Appellee earned 5.6% on the average outstanding capital stock of 1931* (Appendix, p. 127). The rate of return on the basis of the District Court's findings of rate base value for 1932 was only .72% less than 1931 (Appendix, p. 118), although the District Court found a

*Moody's shows that no bonds or stocks were issued by Appellee in 1932 (Moody's Manual of Public Utilities (1933) p. 828).

one per cent difference between the fair return of those years on the basis of the experience of other business undertakings. Such cash return was in addition to the advantages of additional pecuniary profit and additional security enumerated above, received by the American Company as the equity investor of Appellee (*supra,* 464), but which are not received by the ordinary investor outside the Bell System (*infra,* 528; *supra,* 464). The advantage for Appellee's investors in the fund of advance contributions for anticipated depreciation in contemplated future additions, was increased by the depression of 1932 (*supra,* 414). No other facts appear in the record from which deductions and comparisons may be made for 1932 as were made for the years prior thereto.*

In the light of the state of depression in 1931 and 1932, such recorded net income, if considered as total return, and certainly if considered in connection with the advantages of

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*Moody's shows that Appellee paid 8% dividends in 1932 (ibid, p. 828); and that reductions in the dividend rate in 1932 of other Bell System Companies were as follows: Chesapeake & Potomac Tel. Co. (W. Va.) from 4% to 2% (ibid, at p. 824); Michigan Bell Tel. Co. from 4% to 2½% (ibid, at p. 831); New Jersey Bell Tel. Co. from 8% to 7¼% (ibid, at p. 837); and Ohio Bell Tel. Co from 6% to 4¾% (ibid, at p. 847).

Moody's shows that in 1932 the average yield on resale price on five Associated Company bonds, including those of Appellee, is lower than that of other utilities as follows:

Month	Bell System Bonds (Moody's, ibid, p. a138)	Electric Power & Light Company Bonds (Moody's, ibid, p. a110)	Gas Company Bonds (Moody's, ibid, p. a130)	Electric Railway Company Bonds (Moody's, ibid, p. a123)
Jan.	5.06%	5.17%	5.19%	13.39%
Feb.	5.10	5.23	5.34	13.89
Mar.	4.93	5.02	5.12	13.96
April	4.89	5.08	5.15	14.79
May	4.92	5.23	5.27	17.79
June	4.95	5.35	5.46	19.31
July	4.93	5.18	5.34	18.24
Aug.	4.76	4.90	5.08	14.98
Sept.	4.67	4.78	4.94	14.09
Oct.	4.57	4.65	4.79	15.34
Nov.	4.56	4.63	4.73	17.20
Dec.	4.50	4.55	4.68	17.73

additional pecuniary profit and additional security received by its investors as part of the return on their investment was certainly not confiscatory.

DISCUSSION AS TO CONTENTION NUMBERED II.

II.

THE REDUCTION IN APPELLEE'S RECORDED RETURN FROM ITS CHICAGO INTRASTATE BUSINESS UNDER THE EXISTING RATES WHICH WOULD HAVE RESULTED IF THE ATTACKED RATES HAD BEEN IN EFFECT WOULD NOT HAVE CAUSED CONFISCATION IN ANY OF THE YEARS OF THE LITIGATION.

A.

The net income available for return under the attacked rates as found by the District Court is compensatory for each year of the litigation.

PERIOD 1923-1929, INCLUSIVE.

Although the attacked rates would have reduced gross revenues by more than $2,000,000 per year (R. VII, 4082) and net revenues by more than $1,500,000 a year (Appendix, p. 120), the *recorded return* upon which Appellee financed itself would have been reduced by less than $652,000 in each of the years 1923 to 1927, inclusive, and by less than $1,294,000 in 1928 and 1929, respectively (Appendix, p. 121). For the seven-year period, the total reduction would have been, in gross revenues, $15,072,103 (R. VII, 4082); in net revenues $11,456,172 (Appendix, p. 120); in recorded return $5,299,460 (Appendix, p. 121). The differ-

ence between such reduction in net revenues and in recorded return—$6,156,712—represents the amount of the adjustments made to such recorded return by the District Court's findings on License Contract Payments and Depreciation Expense Charges (R. III, 2519-20; Appendix, pp. 95, 128).

On the basis of the District Court's findings, the net earnings available for return under the attacked rates in each of the years 1923 to 1927, inclusive, and in 1929 would have yielded sufficient to pay operating expenses, to pay interest and amortization on money borrowed, to pay an 8% cash dividend on outstanding capital stock including $31,222,747 capital stock sold at par, and to carry to surplus amounts ranging from $69,473 to $1,033,020 per year, and aggregating for the six-year period $3,815,787 (Appendix, p. 129). Of such accumulated surplus $385,458 would have been necessary to make up the shortage in 1928 of net earnings to permit the payment of an 8% dividend for that year (Appendix, p. 129).

The net cash income available for return under the rates in suit, as found by the District Court, would have been sufficient to enable Appellee to pay interest and amortization on money borrowed and to yield to Appellee's stockholders on their equity investment allocable to Appellee's Chicago intrastate business, the following rates of return, expressed as a percentage of return on average outstanding capital and on average outstanding capital and surplus, including therein $31,222,747 capital stock applicable thereto sold by Appellee during this period at par:

Year	Rate of Return on Average Capital Stock	Rate of Return on Average Capital and Surplus
1923	9.47%	8.70%
1924	9.79	8.91
1925	10.07	8.98
1926	8.95	7.94
1927	8.13	7.11
1928	7.43	6.53
1929	9.56	8.15

Sources:

R. III, 2521; R. IV, 2748-56; R. V, 3083-90; R. VII, 4075, 4077-9; R. VIII, 4457-61, 4792-4.

Such cash return from the attacked rates in each year is more than the 7½% return to 1927 and the 7% return thereafter which the District Court found as the current per cent of return generally made on similar investments in other business undertakings outside the Bell System (R. III, 2514).

But such cash return was not the total return. In addition to the above rate of return the District Court confirmed as operating expense the expense of furnishing as part of the return to the American Company as Appellee's equity investor all the advantages of additional pecuniary profit and additional security other than a portion of the license payment (Item 8a, *supra*, 467) received under the existing rates, which advantages are not received by the ordinary investor outside the Bell System.

Appellee's showing under the attacked rates by comparison with the average of the other Associated Companies, suffers by the reduction in recorded net income available for return produced by the attacked rates, and by the reduction in the advantage of pecuniary profit furnished to the American Company as equity investor in Appellee, to the extent of the excess of license payment over the amount

held properly chargeable as an operating expense in each of the years 1923 to 1928, inclusive (Item 8a, *supra*, 467). Such comparison shows:

(1) The rate of return from Appellee's Chicago Intrastate business under the attacked rates as found by the District Court, compares as follows with the average rate of return realized by the other Associated Companies related to their respective average outstanding capital and surplus:

	23 Other Associated Companies (a)	Appellee (b)	Difference in Dollars (b—a) (c)
1923	7.19	8.70%	$ 622,013
1924	6.80	8.91	990,199
1925	7.59	8.98	688,076
1926	8.40	7.94	258,425*
1927	8.44	7.11	825,463*
1928	8.72	6.53	1,690,443*
1929	8.71	8.15	436,529*
Total			$ 910,572*

Col. (f)—computed by applying per cents in columns (d) and (e) to Chicago Div. Intrastate portion of capital stock and surplus (R. V, 3083-90; R. VIII, 4457-61).

*Red.

Appellee's entire company net earnings available for return under the attacked rates compares as follows with that of the other Associated Companies related to their respective average capital and surplus outstanding:

	23 Other Associated Companies (a)	Appellee (b)	Difference in Dollars (b—a) (c)
1923	7.19	8.88	$1,095,212
1924	6.80	9.20	1,768,510
1925	7.59	8.78	920,294
1926	8.40	8.51	100,807
1927	8.44	8.66	218,292
1928	8.72	8.49	285,155*
1929	8.71	9.19	609,828
Total			$4,427,788

*Red.

(2) On the basis of the District Court's *allowance of license payments* as operating expense, Appellee's contribution to the American Company of advantages of pecuniary profit under the attacked rates would fall short of the corresponding average contribution by the other Associated Companies in the years 1923 to 1927, inclusive, by amounts ranging from $166,000 to $250,000 per year and aggregating for these five years $997,076; and would exceed the corresponding average contribution in the years 1928 and 1929 by $52,000 (R. III, 2519; R. VII, 4063-4) and $201,000, respectively—the net shortage for the seven-year period being $743,681.

(3) Appellee's Chicago intrastate rate of return plus license payment to the American Company under the attacked rates, as found by the District Court, exceeded the average of the other Associated Companies in the years 1923 to 1925, inclusive, by amounts ranging from $455,916 to $762,677 per year and aggregating for the three-year

period $1,727,971, and fell short in the years 1926 to 1929, inclusive, by amounts ranging from $235,479 to $1,638,098 per year and aggregating for the four-year period $3,382,224, a net shortage of $1,654,253.*

Such net shortage would be more than offset by the advantage of pecuniary profit (*supra,* 464) received by the American Company from Appellee and not received from the other Associated Companies resulting from the surrender by Appellee of its right to participate in the receipts and profits of the long distance business transacted in Chicago (*supra,* 50, 66, 471).

In the light of the actual financial and financing experience of the other Associated Companies, as well as of Appellee during this period, the reduction in recorded net cash income by the attacked rates could not have caused confiscation in any of the years 1923 to 1929, inclusive, ~~entirely~~ respectively.

1930.

On the basis of the District Court's findings, the attacked rates in 1930 would have reduced gross revenues by $1,870,000, net revenues by $1,645,000, but would have reduced the recorded return by only $892,000 (R. III, 2520-1; R. VII, 4082, Appendix, p. 121). The difference between such reduction in net revenues and in recorded return—$753,000—represents the amount of the adjustments made to such recorded return by the District Court's find-

*On the basis of Appellee's entire company operations, Appellee's rate of return plus license payment (as found by Court) under the attacked rates exceeded the average of the other Associated Companies in the years 1923 to 1925, inclusive, and in 1929 by amounts ranging from $738,770 to $1,643,121 per year and aggregating for the four-year period $4,218,556, and fell short in the years 1926 to 1928 by amounts ranging from $164,520 to $351,235 per year and aggregating for the three-year period $630,408, a net excess of $3,588,148.

ings on Depreciation Expense charges and Maintenance Expense (R. III, 2519-20; Appendix, pp. 95, 128).

On the basis of the District Court's findings, Appellee would have earned sufficient to pay operating expenses, to pay interest and amortization on money borrowed, and would have fallen short by only $253,727 of earning its 8% dividend of $6,148,243 applicable to its Chicago Intrastate business.*

Such cash return would yield to its investors 7.67% on outstanding capital stock including the $23,600,000 (R. VIII, 4815) capital stock sold in 1930 at par, allocable thereto—a higher percentage than the 7% return which the District Court found as the current per cent of return generally made on similar investments in other business undertakings outside the Bell System; and 6.55% on corresponding capital and surplus.

The rate of return from the attacked rates in 1930 (on the basis of the District Court's finding of rate base value) would have been higher than in any of the years 1923 to 1928, inclusive (R. III, 2522). But such cash return would not constitute the total return to the American Company as Appellee's equity investor. In addition thereto, the American Company would receive all the advantages of additional pecuniary profit and additional security received under the existing rates other than a portion of the license payment, which advantages are not received by the ordinary investor outside the Bell System (*supra,* 464, *infra,* 528).

Appellee's showing under the attacked rates would have fallen short of the average return on outstanding capital and surplus of the other Associated Companies by $860,617

*Appellee's 8% dividend on its entire capitalization would have been earned by its entire company operations in 1930 if the attacked rates had been in effect, by $1,678,754 (R. V, 3090; R. VIII, 4510; Appendix, p. 121).

on the basis of allocating the entire Chicago intrastate capitalization to *operating revenues* (R. VII, 4362-64a; R. VI, 4027; R. V, 3083-90; R. VIII, 4457-61; R. III, 2521).*

Appellee's Chicago intrastate contribution to the American Company in respect to the license payment (as found by the District Court) would have exceeded the average of such companies by $162,277 (R. III, 2519; R. VII, 4063-4), leaving a net shortage of $698,340.

This net shortage in Appellee's showing would be offset by the special contribution ($490,000) made to the American Company by Appellee's Chicago intrastate business in the long distance arrangement (*supra*, 50). In the light of the compensatory character of the recorded return in 1930 and of that of the other Associated Companies, the slight reduction in comparative return could not have caused confiscation—certainly not to the extent of permitting Appellee to get the full advantage of $1,645,000 net income from the enjoined rates at the expense of $1,870,000 to its subscribers.

1931.

On the basis of the District Court's finding, the attacked rates would have reduced gross revenues by $1,632,000 (R. VII, 4082), net revenues by $1,433,000, but would have reduced recorded return by only $229,000 (Appendix, pp. 120-1). The difference between such reduction in net revenues and in recorded return—$1,204,000—represents the amount of the adjustments made to such recorded return by the District Court's findings on Depreciation Expense charges and Maintenance Expense (R. III, 2519-20; Ap-

*Appellee's showing under the attacked rates would have exceeded the average of the other Associated Companies by $690,595 on the basis of the entire company showing (R. VII, 4362-64a; R. VI, 4025, 4027; R. V, 3083-90; R. VIII, 4457-61; Appendix, p. 121).

pendix, pp. 95, 128). Such shortage would merely offset the amount of excess contribution which Appellee's intrastate business made in 1931 to the American Company ($199,000) through the license payment over the average of the other Associated Companies (R. VII, 4063-4). The yield from the attacked rates would have been 7.42% on outstanding capital stock, and 6.42% on corresponding capital and surplus.

In the light of the compensatory character of the recorded return in 1931 (*supra*, 482) the slight reduction in recorded return could not have caused confiscation in 1931—certainly not to the extent of permitting Appellee to get the full advantage of $1,433,000 net income from the enjoined rates at the expense of $1,632,000 to its subscribers. To so do would give Appellee a greater net return than it showed for 1930 on an investment which was $8,000,000 less than that of 1930, as determined by the District Court (R. III, 2515)—clearly a fantastic result.

1932.

The record closed in July, 1932. In May, 1932, Appellee estimated that its Chicago Intrastate net earnings for 1931 would be reduced by $1,800,000 in 1932 on account of the depression, and that the additional loss in net revenues would be $1,270,000 for the year if the attacked rates were in effect (R. II, 1082). The District Court used these estimates in finding the net income available for return under the attacked rates for 1932 (R. III, 2521). On the basis of the District Court's finding the recorded return under the existing rates for 1932 would have been reduced by only $71,300 (Appendix, p. 121). The difference between such reduction in net revenues and in recorded return—$1,198,700—must represent the amount intended to cover

the adjustments to such recorded return on Depreciation Expense charges and Maintenance Expense. But the District Court made no findings on either item of expense.

The District Court's findings on the return from the attacked rates is arbitrary. It assumes, contrary to fact, that the effect of the District Court's adjustments covering depreciation expense charges and maintenance for 1932 on the recorded net income for that year will be the same as the effect of such adjustments for 1931 on the recorded net income for that year. The recorded net return for 1929 was reduced in 1930 through operations by $848,000 (Appendix, p. 118), and the reduction in net revenues in 1930, if the attacked rates had been in effect, was estimated at $1,645,000 (Appendix, p. 120), a total loss of $2,493,000. But the difference between the District Court's finding of net income under the existing rates in 1929 and 1930 plus the reduction in net revenues in 1930 if the attacked rates had been in effect was only $2,187,000 (Appendix, pp. 119-20). The recorded return of 1930 was reduced in 1931 through operations by $764,000 (Appendix, p. 118), and the reduction in net revenues by the attacked rates was $1,433,000 (Appendix, p. 120), a total loss of $2,197,000. The difference between the District Court's finding of net income under the existing rates in 1930 and 1931 plus the reduction in net revenues in 1931 if the attacked rates had been in effect was only $1,746,000 (Appendix, pp. 119-20). Had the District Court given effect to the adjustments in respect to depreciation expense charges and maintenance in manner similar to that of the previous years, the net income under the attacked rates would have been several hundred thousand dollars greater than the recorded return for 1932. In any event, the District Court did not and could not make a finding on maintenance and

depreciation expense charges. Without such findings, its finding on the rate of return from the attacked rates is arbitrary.

Assuming, however, such a finding were not arbitrary, the net revenue from the attacked rates as found by the District Court was only part of the return to Appellee's investors. Such net income would have been earned after absorbing as operating expense the costs of providing the advantages of additional pecuniary profit and additional security, confirmed by the District Court, which are not received by investors outside the Bell System.

In no event should the $71,000 shrinkage permit Appellee to retain $1,270,000 at the expense of a much larger charge to its subscribers. The 1932 showing under the recorded return was compensatory.

B.

The net income available for return under the attacked rates as found by the District Court but adjusted to give effect to Appellants' adjustments, is compensatory for each year of the litigation.

Thus far we have dealt with the situation on the basis that the District Court's finding on every issue other than Fair Return was correct.

1. Giving effect to Appellants' contentions on Separation of Revenue, License Contract Payments and Depreciation Expense, and to their contentions that the Rate-Base Value should be measured by (a) the book cost of plant less the amount of the depreciation reserve account, (b) Going Value as prescribed by the Commission in the attacked Order, and (c) material and supplies and cash working capital as found by the District Court, the rate of

return from the attacked rates related to such rate base is (Appendix, p. 135):

1923	10.6%
1924	9.8
1925	9.3
1926	8.9
1927	8.7
1928	8.6
1929	9.5
1930	8.3
1931	7.5

Such rate of return above shown would be even higher if, from the operating expenses, were deducted the excess depreciation expense charges and maintenance expense, and if from the rate base were deducted excess costs, all due to and reflected in the excessive return realized by Western during the years of the litigation from sales to Appellee. Even on the basis of the District Court's fantastic findings of required minimum rate of return to avoid confiscation, the attacked rates are compensatory.

2. Giving effect to the Appellants' contention that the 1920 Order on Depreciation should determine the depreciation expense charges in the computations of the net earnings available for return from the existing rates, (*supra*, 383), the recorded return understated Appellee's actual return from such rates by the difference between the recorded depreciation charges and those prescribed by the 1920 Order as follows (Appendix, p. 136):

1923	$1,552,903
1924	1,336,432
1925	1,490,059
1926	1,658,501
1927	1,758,082
1928	1,931,509
1929	1,855,743
1930	1,958,592
1931	2,018,960

Such understatement of net earnings exceeds in each year the reduction in net earnings which would have been caused if the attacked rates would have been placed in effect (Appendix, p. 136).

Appellee, therefore, would not have suffered any reduction in recorded net earnings had the attacked rates been put in effect and had Appellee complied with the Commission's Order on Depreciation.

As the recorded return was compensatory (*supra*, 455), suit should never have been brought.

DISCUSSION AS TO CONTENTION NUMBERED III.

III.

THE DISTRICT COURT'S FINDINGS OF THE REQUIRED MINIMUM RETURN TO AVOID CONFISCATION PRODUCED FANTASTIC RESULTS WHEN APPLIED TO APPELLEE'S ACTUAL EXPERIENCE DURING THE PERIOD UNDER INVESTIGATION.

In the *Willcox* Case (212 U. S. 19, at 48, 49 (1909)) this Court announced for the first time a test of compensatory rates in reliance upon the "fair return" part of the rule in *Smyth* v. *Ames* (169 U. S. 466 (1898)). The test fixed the rate of return deemed "fair" as equal to that "generally received on investments in other business undertakings of corresponding risks and uncertainties". This remained the test for that purpose until *Bluefield Water Works, etc.* v. *Commission* (262 U. S. 679, at 693 (1923)). In that period the test was applied in the *Willcox* Case to sustain state action and again in *Denver* v. *Denver Water Company*, (246 U. S. 178 (1915), to void state action. In the *Willcox* Case, the

situation was presented when for the first time the rate base upon which the rate of return was claimed exceeded the utility's capitalization, and both parties to the litigation used the comparative return on local investments as the yardstick by which to measure the adequacy of the stated return (*Willcox* Case, 212 U. S. 19 at 29, 31, 37). In the *Denver* Case the apparent simplicity of prewar finance justified this Court to view corporate securities, and "secured loans on residence and business properties" of the same locality in the same category (*Denver* Case, *supra*, at 194).

In the *Southwestern Bell* Case (262 U. S. 276 (1923)) was visioned the possibility of a fantastic result in favor of the utility from the strict application of the "comparative return" test of the *Willcox* Case, even when based upon sufficient facts. The visioned fantastic result was a required minimum rate of return to avoid confiscation of 41% on outstanding capital of the utility, produced by the application of a current 8% return to the current fair value of the property originally acquired with such capital (*Southwestern Bell Tel. Co.* v. *Commission*, 262 U. S. 276, at 305).

The language of the test of compensatory return of the *Willcox* Case was repeated in the *Bluefield* Case, to which was added the test which fixes the return deemed "fair" as the return "sufficient to assure confidence in the financial soundness of the utility to maintain its credit and to raise money necessary for the proper discharge of its public duties" (*Bluefield* Case, *supra*, at 693). In the *United Railways* Case this Court announced that for a return to be so sufficient it must provide enough so that "after paying all expenses of operation, setting aside the necessary sums for depreciation, payment of interest and reasonable dividends, there should still remain something to be passed

to the surplus account" (*United Railways* Case, *supra,* at 252)..

In every case since the *Bluefield* Case where the issue of confiscation required the application of the "return" part of the rule of *Smyth* v. *Ames,* this Court applied in reliance thereon the "attraction of capital and maintenance of credit" test announced in the *Bluefield* Case and not the "comparative return" test of the *Willcox* Case. In so doing, this Court took into account the factual situation of the utility concerned, in respect to its current and past earning experience, its current and past financing experience, its dividend record, and any special facilities which it might have for financing as part of a system organized for that purpose, and which the ordinary utility company does not possess (*Smith* v. *Illinois Bell Telephone Company,* 282 U. S. 133, 161; *Wabash Valley Electric Company* v. *Young,* 287 U. S. 488, at 501-2 (1933)).

The District Court in the instant case claimed that it applied the "comparative return" test of the *Willcox* Case using therein the claimed experience of other business undertakings *outside* the Bell System.

The District Court's claimed application of the test of compensatory rate of return upon the basis of such experience produced in the instant case a result in Appellee's favor at least as fantastic as that visioned in the *Southwestern Bell* Case. In that case the consideration that a fantastic result might be produced by the strict application of such test was suggested as a reason for condemning it. The consideration that a fantastic result would in fact be produced in the instant case by the District Court's claimed application of the same test, if it does not condemn the test itself, at least should cause this Court to insist on the same "clear and convincing proof" of the proper application of

such test, of the applicable experience of the business undertakings relied on, and of the applicable essential facts necessary to render their experience and that of Appellee comparable, as this Court demanded in the *Missouri Rate* Cases in respect to proof of the fantastic value therein claimed (230 U. S. 474, at 501, 507).

That the District Court's findings of Required Minimum Return to avoid confiscation produced a fantastic result in the instant case is clear. The required minimum return to avoid confiscation of 7½% in the years 1923 to 1927, inclusive, 7% in the years 1928 to 1930, inclusive, and 6½% in 1931 would enable Appellee to pay interest and amortization on money borrowed, and would yield to Appellee's stockholders on their equity investment (capital and surplus), allocable to Appellee's Chicago Intrastate buisness, the following rate of return, expressed as a percentage of return on average outstanding capital and average outstanding capital and surplus:*

	Rate of Return on Capital Stock	Rate of Return on Capital and Surplus
1923	20.63%	18.95%
1924	19.88	18.09
1925	21.04	18.76
1926	18.84	16.72
1927	18.89	16.52
1928	15.10	13.27
1929	15.49	13.21
1930	13.66	11.67
1931	11.15	9.65
1932	Not available	Not available

Included in such outstanding capitalization to which such rate of return would have application would be $54,000,000

*The sources of the table in the text are: R. III, 2515, 2521; R. IV, 2748-56; R. V, 3083-90; R. VII, 4075, 4077-9; R. VIII, 4457-61, 4792-4.

capital stock purchased by Appellee's stockholders at *par during the very period of the litigation* (Appendix, p. 125).

But such rate of return would not constitute the entire return to Appellee's investors. Such rate of return would be earned after absorbing, as operating expense, the expenses of furnishing as part of the return to the American Company, the equity investor in Appellee, the advantages of additional pecuniary profit, already described, confirmed by the District Court's findings, which are not received by the ordinary investor in the ordinary public utility or other business undertakings outside the Bell System, and the special advantages of additional pecuniary profit in the long distance arrangement with Appellee which the American Company did not receive from the other Associated Companies (*supra*, 471).

Such unreasonably large rate of return and advantages of additional pecuniary profit would be earned for the American Company, Appellee's equity investor who would also enjoy the advantages of additional security above described and confirmed by the District Court's findings which are not enjoyed by the ordinary investor in the ordinary public utility or other business undertakings outside the Bell System.

The District Court's required minimum cash return to avoid confiscation would enable Appellee to pay interest and amortization on money borrowed, to pay cash dividends of eight per cent upon its capital stock allocable to its Chicago Intrastate business and to carry to surplus from $4,700,000 to $5,900,000 per year during the period 1923 to 1929, inclusive, aggregating for the seven years $36,719,773, and to carry to surplus $4,350,000 in 1930, and $2,740,000 in 1931—a total accumulated surplus of $43,

816,344 (Appendix, p. 130). No figures are available for 1932.

Such $43,816,344 accumulated surplus would exceed by $3,593,498 the total investment (capital and surplus) (O.R. VI, 2120b; R. V, 3083, ratio) on December 31, 1922, which Appellee's stockholders had in the Chicago Intrastate business and would be only $5,497,374 less than the total additions to their average investment in that business during the period 1923 to 1931, inclusive, through their purchase of Appellee's stock. Such accumulated surplus would exceed by $24,000,000 the surplus accumulated by Appellee during the same period from all of its operations (O.R. VI, 2120b; R. VIII, 4792-4) although Appellee's Chicago Intrastate capital investment for the period represented only 61:04% of Appellee's entire company investment (R. V, 3083-90).

The financing machinery of the Bell System requires that at the end of each year each Associated Company prepare, under the direction of the American Company, and forward to it, a Provisional Estimate. These Estimates form the basis on which the American Company made its investments in the Associated Companies, including Appellee, during the period under investigation (R. VIII, 4506, 4513). Their function is described as follows by the Comptroller of the American Company (R. I, 977-8):

> "Each licensee company [Associated Company] sends a provisional estimate which is the starting point in giving its estimated requirements, as they see them. We review them, but it is very seldom that we make any changes unless they are obviously miscellaneous items of financing and so forth that should be handled —that might be handled on some other and better basis. So that we might change the amount of the estimated requirements slightly, but generally it is the amount of the provisional estimate. My department and others

in the company review it, and it finally terminates in an authorization by the executive committee'' (R. I, 977). Such authorization is to make the American Company's investment in the Associated Companies (R. I, 977, 961).

In each Estimate is shown, among others, the actual and estimated future Net Telephone Earnings Related to Undepreciated Average Book Cost of Plant in Service. The Provisional Estimates submitted prior to 1930 showed the actual earnings recorded on the books of each Associated Company covering the year of the Provisional Estimate and the year prior thereto and showed the estimated future earnings covering five years subsequent to the year of the Provisional Estimate; in the 1930 Provisional Estimate, only a three-year forecast was included.

The actual and estimated earning results appearing in each Provisional Estimate are reproduced in the Appendix hereto (Appendix, p. 131). On the basis of these estimates, the American Company purchased $89,418,500 of Appellee's stock (R. VI, 4025). Comparing these results with the District Court's finding of Required Minimum Return to avoid confiscation, we find:

(1) Appellee's showing of actual net telephone earnings related to the undepreciated book cost of average plant in service, in its entire company operations and related to average outstanding stock compares as follows with the District Court's finding of required return related to the corresponding rate bases:

	Provisional Estimate Rate of Return		District Court's Finding of Required Minimum Rate of Return	
	On Average Book Plant in Service	On Capital Stock	On Average Book Plant in Service	On Capital Stock
1923	6.04	10.51	10.67	20.63
1924	6.18	10.79	10.34	19.88
1925	6.41	11.76	10.05	21.04
1926	6.13	11.09	9.15	18.84
1927	5.92	10.37	9.13	18.89
1928	6.20	10.72	8.12	15.10
1929	6.73	11.88	8.05	15.49

(2) The range of prognosticated future earnings related to book cost of plant in service for the five-year period as shown in each Provisional Estimate is:

	Rates on Book Cost of Plant in Service
1923 Provisional Estimate	5.56% to 6.82%
1924 " "	5.71% to 6.13%
1925 " "	5.69% to 5.92%
1926 " "	5.83% to 6.60%
1927 " "	5.69% to 6.47%
1928 " "	5.93% to 6.77%
1929 " "	6.00% to 6.41%
1930 " "	5.38% to 6.04%

The District Court's findings of required minimum returns and the American Company's actions as investor in Appellee cannot be reconciled.

On the basis of the average return of the other Associated Companies during the years 1923 to 1930, inclusive, Appellee would have earned from $3,500,000 to $5,500,000 less per year than the required minimum return found by the District Court—the total shortage would have been over $36,000,000 (Appendix, p. 133).

Though the American Company almost tripled its investment in the other Associated Companies during the eight-year period 1923 to 1930, inclusive, by making equity investments in them of $1,027,730,780 (R. VI, 4025), the District Court's findings of required minimum return to avoid confiscation would indicate that the telephone indus-

try represented by the Bell System had been under a heavy blanket of confiscation during this period.

Enough has been shown already to prove that the result produced by the District Court's Findings on the Required Minimum Return to avoid confiscation is fantastic. We now pass to the errors which produced such result.

DISCUSSION AS TO CONTENTION NUMBERED IV.

IV.

THE DISTRICT COURT'S USE OF THE INVESTMENT EXPERIENCE OUTSIDE THE BELL SYSTEM IN ITS APPLICATION TO APPELLEE OF THE COMPARATIVE RETURN TEST OF COMPENSATORY RATES OF THE WILLCOX CASE WAS FATALLY DEFECTIVE.

A.

Unsupported general statements or judicial notice covering post-war returns on corporate investments outside the Bell System should not be accepted as adequate proof in support of a finding of confiscation.

The District Court's conclusion as to the current returns on investments outside the Bell System was based either on judicial notice or on the unsupported general statements of Appellee's two banker witnesses.* Appellants' position

*One banker—the Vice-President of the National City Bank and its affiliate, the National City Company—underwriters of Bell System securities—testified in detail on the basis of the assumptions discussed in the text—the other, who merely confirmed his testimony, was Vice-President of the Chicago bank which acted as Appellee's depositary and on whose board of directors were Appellee's two principal executive officers (R. I, 151; R. II, 1153, 1155).

is that neither their unsupported general statements nor judicial notice covering the return generally received in underwritings of other business undertakings outside the Bell System should be accepted as adequate proof to sustain a finding of confiscation to void state action where the issue involved covers the important and intricate subject of post-war corporate finance. (*Missouri Rate Cases,* 230 U. S. 474, at 501, 507.)

The apparent simplicity of pre-war and immediate post-war corporate finance which justified this Court in the *Denver Water Co.* Case (*supra,* 500) and justified this and other courts in dealing with that period to view corporate securities, real estate mortgage securities and legal interest rates in the same category as presented;* and the investment characteristics of that period which justified courts to view the comparative return requirements of senior and junior securities on the basis of their comparative risk positions as presented** disappeared in the decade covered by the present litigation.

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*Denver v. Denver Water Co., 246 U. S. 178, at 194; Lincoln Gas & Electric Co. v. Lincoln, 250 U. S. 256, at 259 (1918); Record. Lincoln Gas & Electric Co. v. Lincoln, (250 U. S. 256, 1918; record covered period 1907 to 1915), pp. 54, 55; Record, Galveston Electric Co. v. City of Galveston (258 U. S. 388, 1922; record covered period 1918 to June 30, 1920), pp. 137, 130, 70-76; Record, Brush Electric Co. v. City of Galveston (262 U. S. 443, 1923; record covered period 1919-1920), pp. 218, 245; Record, City of Fort Smith v. Southwestern (270 U. S. 627, 1926; record covered year 1922), pp. 193-194; Reno Power, Lt. & Water Co. v. Public Service Commission, 298 Fed. 790, at 792 (1923; case covered period 1920-1921); City of Minneapolis v. Rand, 285 Fed. 818, at 830 (1923; case covered period 1919-1920); Joplin Gas Co. v. Public Service Commission, 296 Fed 271, at 281 (1924; case covered period 1920-1923).

**Record, Southwestern Bell Telephone Company v. Public Service Commission of Missouri (262 U. S. 276, 1923, record covered period 1918-1919), p. 159; Record, Bluefield Water Works & Improvement Co. v. Public Service Commission (262 U. S. 679, 1923, record covered period 1918-1920), p. 95, Brief of Appellants, pp. 40-43; Record, Patterson v. Mobile Gas Co. (271 U. S. 131, 1926, record covered period 1921-1922), p. 405, Brief of Appellee, pp. 109-110; Record, McCardle v. Indianapolis Water Co. (272 U. S. 400, 1926, record covered period 1919-1923), p. 76, Brief of Appellee, p. 122.

To present the intricacies of corporate finance of the past decade and the variable factors therein influencing investment demands for corporate securities, Appellants presented before the District Court studies* covering:

(1) 878 bond issues aggregating $14,344,000,000 of bonds representing all the long term** bond issues of $5,000,000 or over issued during the period 1921-1931, inclusive, by railroads, public utilities and industrials.

(2) the stock issues of such corporations, and

(3) the financing data of the Bell System.

Examination of the records presented in this Court in the cases involving Fair Return since the World War discloses that no such data has been presented to this Court; Appellants therefore have incorporated in the appeal record in the instant case the essential parts of such studies, summary charts of which are reproduced in the Appendix hereto (Appendix, pp. 144-149).

The studies show that each step in the process of fixing the annual cost of new corporate issues (as in the case of depreciation expense calculations), is "beset with difficulties, because of the variables which attend every determination involved," and that the exactitude of the banker's opinions in respect thereto is "delusive" (*United Railways* Case, 280 U. S. 234, at 282, 283).

These studies show that:

Credit Obligations.

A.

In the determination of the actual or probable cost to Appellee of credit money in any given year:

*R. II, 1741, et seq.; R. VII, 4190 A to 4345.

**Long term bonds refer to bonds maturing in five years or more from date of issue.

1. No significance attaches to the "average cost" of money—or to the component parts thereof, "average spread" (banker's commission or discount) and "average yield" on public offering price—in any given year or over a period of years, based upon the experience of bonds issued therein by other business undertakings and not grouped according to some investment rating classification.[1] *To illustrate:*

(a) The "average cost" of money to railroads in 1923 was 5.50 per cent (R. VII, 4190a, Appendix, p. 147), but the cost of money to one railroad[2] was 4.76 per cent, to another,[3] 6.52 per cent. The "average cost" of money to public utilities in 1923 was 6.03 per cent (R. VII, 4190a), but the cost of money to one utility[4] was 5.29 per cent, to another,[5] 6.69 per cent and to Appellee, 5.53 per cent (R. VII, 4260a).

(b) The "average spread"* in 1924 on railroad bond issues was .23 per cent, on public utility bond issues, .40

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(1) Appellee's banker witness on Fair Return testified (R. I, 185):

"In connection with the various classes of securities, investors have come to think of bonds in certain classifications: bonds legal for savings banks and bonds not legal. They have also come to think of the classifications in the terms in which some of the established services have rated them, that is, as A-1 bonds or as Triple-A bonds. Many investors have in mind those ratings in connection with the type of securities purchased.

We have as fields for bonds, the savings bank, the trust funds, the so-called conservative investor, the so-called speculative investor, and the so-called business man risk investor. And all of these various classes of investors do not buy the same kind of bonds. The savings banks, the trustees, and the conservative investors are very likely to confine their purchases to bonds of the general character rated by Moody as Triple-A bonds. Generally speaking, the trust funds would confine their purchases to Triple-A bonds. The conservative investor would buy a higher-rated, or more conservative bond than the speculative investor."

Appellants have used Moody's ratings.

(2) Delaware, Lackawanna & Western R. R. (R. VII, 4284a).

(3) Southern Railway Co., ibid.

(4) Spring Valley Water Co. (R. VII, 4285).

(5) Illinois Power & Light Corporation, ibid.

*The examples in the text covering cost of money and spread are taken from the exhibits embodying the study of 330 long term bond

per cent (R. VII, 4190a, Appendix, p. 147), but the spread on one railroad bond issue[1] was .11 per cent, on another[2] 1.11 per cent, on one public utility bond issue[3] was .20 per cent, on another[4] 1.07 per cent.

(c) The "average yield" on public offering prices** in 1926 on railroad bond issues was 5.10 per cent, on public utility bond issues, 5.42 per cent (R. VII, 4198), but the yield on public offering on one railroad bond issue[5] was 4.51 per cent, on another,[6] 6.41 per cent, on one public utility bond issue[7] was 4.80 per cent, on another,[8] 6.65 per cent.

2. *No significance attaches to the trend of the "average cost" of money—or of the component parts thereof—based upon the experience of bonds issued over a period of years and not grouped according to some investment rating. To illustrate*:

(a) The trend of the "average cost" of money to public utilities between the years 1926 and 1927 was downwards to the extent of .31 per cent (R. VII, 4190a, Appendix, p. 147),

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issues offered during the years 1921 to 1931, inclusive, aggregating $6,138,000,000 of issues other than industrials as shown in the records of the Interstate Commerce Commission, and of ten State Commissions (R. II, 1751). The study is summarized in charts, R. VII, 4190a, b and 4192d, e.

(1) Louisville & Nashville R. R. Co. 1st & Ref. 4½'s "C" (R. VII, 4262, 4275).

(2) Florida & Western & Northern R. C. Co., 1st M. 7's "A" (R. VII, 4263, 4275).

(3) Cleveland Electric Illuminating Co. Gen. M. "A" (R. VII, 4286, 4295).

(4) Ohio Public Service Company, 1st M. & Ref. Bonds (R. VII, 4286, 4297).

**The examples in the text covering yield on offering price are taken from the exhibits embodying the study of 829 long term bond issues offered during the years 1923 to 1931, inclusive, aggregating $13,809,000 of issuers of all classes (R. II, 1752). The study is summarized in charts (R. VII, 4196a and 4216a).

(5) Norfolk & Western Ry. Co., 1st & Gen. M. 4's (R. VII, 4265).

(6) Seaboard Air Line Ry. 1st, Cons. M. 6's "A" (R. VII, 4264).

(7) Connecticut Lt. & Pr. Co., 1st M. 4½'s (R. VII, 4301).

(8) General Public Utilities Co., 1st M. & Coll. Tr. 6½'s (R. VII, 4303).

but the cost of money to two utilities[1] issuing bonds in both years increased .63 per cent and .61 per cent, respectively, and to a third,[2] decreased .03 per cent. The trend of the "average cost" of money to railroads between the years 1930 and 1931 was downwards to the extent of .03 per cent (R. VII, 4190a, Appendix, p. 147), but the cost of money to six railroads issuing bonds in both years was as to four[3] increased .77 per cent, .68 per cent, .32 per cent and .03 per cent, respectively, and, as to two,[4] decreased .40 and .20 per cent, respectively.

(b) The trend of the "average spread" on public utility bonds between the years 1923 and 1924 was upwards to the extent of .09 per cent (R. VII, 4192c-93), but the spread on one utility's bonds[5] issued in both years decreased .21 per cent, on another's[6] remained the same, and on a third's[7] increased .02 per cent.

(c) The trend of the "average yield" on public offering on public utility bonds between the years 1924 and 1925 was downwards to the extent of .25 per cent (R. VII, 4196a-4200; Appendix, p. 146), but the yield on public offering of one utility's bonds[8] issued in both years increased .15 per cent, on another's[9], decreased .07 per cent.

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1. Public Service of No. Illinois; Illinois Power & Light Corporation (R. VII, 4288-9).
2. Southern California Edison Co. (R. VII, 4288-9).
3. Cincinnati Union Terminal Co.; Louisville & Nashville R. R. Co.; Missouri Pacific; Southern Pacific Co. (R. VII, 4281-3).
4. Pennsylvania R. R. Co.; Boston & Maine R. R. (R. VII, 4281-3).
5. Illinois Power & Light Corp. 1st and ref. 6's "A" (1923), 1st and ref. 5½'s (1924) (R. VII, 4286, 4296-7).
6. Pacific Gas & Elec. Co., 1st and Ref. Mtg. Bonds (1923), 1st and Ref. Mtg. Bonds (1924) (R. VII, 4285, 4294-6).
7. Southern California Edison Co., Gen. and Ref. Mtg. (1923); Ref. Mtg. Bonds (1924) (R. VII, 4285).
8. Cities Service Power & Lt. Co., 1st M d's (1924), Ref. Deb. 6's (1925) (R. VII, 4297, 4299).
9. American Power & Lt. Co., Deb. 6's (1924), Deb. 6's (1925) (R VII, 4296, 4298).

B.

The determination of the actual or probable cost to Appellee of credit obligations in any year or over a period of years based upon the experience of bonds issued therein by other business undertakings and grouped according to some investment classification must give effect, among others, to the following factors:

1. There is a wide range in the "average cost" of bond money—and in the component parts thereof—between bond groups of different ratings in the same industry in any given year. To illustrate:

(a) The "average cost" in 1925 and 1930 of bond money grouped by Moody's ratings to railroads and public utilities was as follows (R. VII, 4193-5; Appendix, p. 145):

Bond Issues by Ratings	—Railroads— 1925	1930	Public Utilities 1925	1930
AAA	5.17%	4.80%	5.24%	4.88%
AA	5.43%	4.85%	5.70%	4.94%
A	6.06%	4.93%	5.93%	5.09%
BAA	..	5.32%	6.86%	6.40%
BA	6.75%	5.51%	..	..

(b) The "average spread" in 1924 and 1927 on railroad and public utility bond issues grouped by Moody's ratings was as follows (R. VII, 4193-4; Appendix, p. 145):

Bond Issues by Ratings	—Railroads— 1924	1927	Public Utilities 1924	1927
AAA	.19%	.14%	.20%	.13%
AA	.25%	.14%	.32%	.20%
A	.26%	.16%	.37%	.24%
BAA	1.11%	.18%	.71%	.43%
BA	..	.21%	..	..

(c) The "average yield" on public offering price in 1929 and 1931 on railroad and public utility bond issues grouped by Moody's ratings was as follows (R. VII, 4195; Appendix, p. 146):

Bond Issues by Ratings	—Railroads— 1929	1931	Public Utilities 1929	1931
AAA	4.67%	4.56%	4.75%	4.34%
AA	4.85%	4.62%	5.14%	4.55%
A	4.93%	5.21%	5.39%	4.73%

2. The significance of the average cost—and of the component parts thereof—related to any particular group of bond issues of the same rating is dependent upon the extent of the range in respect thereto within the particular group. To illustrate:

(a) The average cost in 1931 to public utilities issuing AAA bonds was 4.52 per cent (R. VII, 4195), but the cost on one AAA bond issue[1] was 4.37 per cent, on another,[2] 4.65 per cent. The average cost in 1931 to railroads issuing AAA bonds was 4.70 per cent, but the cost on one AAA bond issue[3] was 4.50 per cent, on another,[4] 5.56 per cent.

(b) The average spread in 1931 on AAA public utility bond issues was .18 per cent (R. VII, 4195), but the spread on one AAA issue[5] was .14 per cent, on another[6] .23 per cent. The average spread in 1931 on AAA railroad bond issues was .14 per cent (R. VII, 4195), but the spread on

(1) Consolidated Gas Elec. Lt. & Pr. Co. 1st & Ref. M. S. F. 4's (R. VII, 4291).
(2) Consolidated Gas Co. of N. Y. 20 year Gold Deb. Bonds (R. VII, 4291).
(3) Pennsylvania R. R. Gen. Mtg. "D" (R. VII, 4283).
(4) Louisville & Nashville R. R. Co. Secured 5's (R. VII, 4283).
(5) Commonwealth Edison Co. 1st Mtg. Bonds "F" (R. VII, 4291, 4317).
(6) Consolidated Gas Co. of N. Y. 20 year Gold Deb. Bonds (R. VII, 4291, 4317).

one AAA bond issue[7] was .11 per cent, on another[8] .31 per cent.

(c) The average yield in 1931 on public offering price on AAA public utility bond issues was 4.34 per cent (R. VII, 4195), but the yield on offering price on one AAA issue[9] was 4.22 per cent, on another,[10] 4.45 per cent. The average yield in 1931 on public offering price on AAA railroad bond issues was 4.56 per cent (R. VII, 4195), but the yield on offering price on one AAA issue[11] was 4.40 per cent, on another,[12] 5.12 per cent.

Bond Issues by Ratings	High Yield	Low Yield	Range
AAA	4.45%	4.22%	.23%
AA	4.78%	4.23%	.55%
A	6.70%	4.44%	2.26%

This table belongs under Paragraph 3 on page 516 following.

3. The range within each rating group in respect to the component parts making up cost of money grows wider as the investment rating of the group grows inferior. To illustrate:

(a) In 1924 ranges in yield on public offering price of public utility bonds grouped by ratings was (R. VII, 4250);

Bond Issues by Ratings	High Yield	Low Yield	Range
AAA	5.10%	5.00%	.10%
AA	5.79%	5.00%	.79%
A	6.35%	5.52%	.83%
BAA	7.02%	5.71%	1.31%

(7) New York Central Ref. & Imp. M. "A" (R. VII, 4272, 4283).
(8) Louisville & Nashville R. R. Co. Secured 5's (R. VII, 4272, 4283).
(9) Consolidated Gas Elec. Lt. & Pr. Co. of Balt. 1st & Ref. M. 4's (R. VII, 4317).
(10) Buffalo General Elec. Co. Gen. & Ref. M. 4½'s (R. VII, 4317).
(11) Philadelphia, Baltimore & Washington R. R. Co. Gen. M. "C" (R. VII, 4272).
(12) Cincinnati Union Terminal Co. 1st M. "B" (R. VII, 4272).

(b) In 1927 ranges in yield on public offering price of public utility bonds grouped by ratings was (R. VII, 4251):

Bond Issues by Ratings	High Yield	Low Yield	Range
AAA	4.78%	4.55%	.23%
AA	5.06%	4.58%	.48%
A	5.50%	4.71%	.79%
BAA	7.30%	4.90%	2.40%

(c) In 1931 ranges in yield on public offering price of public utility bonds grouped by ratings was (R. VII, 4252):

4. *Only in the case of bonds of the highest ratings is the yield on public offering substantially equivalent to the yield on current resale price of the outstanding highest grade bonds* (R. VII, 4210a, 4211-15; Appendix, p. 148).* *To illustrate:*

(a) The yield on resale price of AAA public utility outstanding in the years 1923-1931, inclusive, compares as follows with the yield on public offering of public utility AAA bonds in each of said years:

	Yield on Resale Price (R. VII, 4213)	Yield on Public Offering (R. VII, 4197-4200)
1923	5.55%	5.52%
1924	5.12	5.05
1925	4.90	5.00
1926	4.82	4.91
1927	4.65	4.74
1928	4.67	4.49
1929	4.81	4.89
1930	4.66	4.78
1931	4.66	4.33

*The examples herein given relating to yield on resale price are taken from exhibits embodying the study of 720 long term bond issues offered during the years 1923 to 1931 and aggregating $11,347,000,000 of issuers of all classes. The study is summarized in charts R. VII, 4200a, 4204a, 4210a, 4216a, and 4218a.

5. *Appellee's bonds and the bonds of the other Associated Companies are all of the highest investment rating group; only a small percentage of the bonds of other business undertakings are in the same class* (Appendix, p. 144; R. VII, 4192a, 4196a, 4216a). *To illustrate:*

(a) In the years 1923 to 1925 *all* the Associated Companies' bond issues (including Appellee's) aggregating $410,000,000 were rated either AAA or AA; and in the years 1926 to 1931 *all* the Bell System bond issues aggregating $451,000,000 as well as all previously issued and outstanding bond issues were rated AAA (R. VII, 4192a, 4216a).

(b) Of the total amount of $6,892,000,000 public utility bonds issued in these years 9% were rated AAA and 17% were rated AA (R. VII, 4192a).

(c) Of the total amount of $3,544,000,000 industrial and other bonds issued in these years, 9% were rated AAA and 10% were rated AA (R. VII, 4192a).

(d) Of the total amount of $3,046,000,000 railroad bonds issued in these years 35% were rated AAA and 20% were rated AA (R. VII, 4192a).*

CONCLUSION.

The above studies indicate:

1. The experience of bond issues in any year or over a period of years affords no valid basis for the determination of the actual or probable cost to Appellee of credit money in any given year.

*The examples herein given are taken from the exhibits embodying the study of 878 long term bond issues of $5,000,000 or more issued during the years 1923 to 1931, inclusive, aggregating $14,345,000,000 of issuers of all classes (R. II, 1742). The study is summarized in chart form (R. VII, 4192a; Appendix, p. 144).

2. The use of the average cost of money to other business undertakings outside the Bell System as a basis of actual or probable cost to Appellee of credit money must be predicated upon the knowledge of the experience of a very small group of companies in other industries. Neither unsupported general statements in respect to such other business undertakings nor judicial notice by a court in respect thereto *per se* indicate knowledge of or familiarity with such a small group of companies.

3. The experience of the small group above referred to as a basis of actual or probable cost to Appellee of credit money reveals that their average cost of credit money in the years 1923 to 1931, inclusive, was as follows (R. VII, 4192-5):

	Railroads	Public Utilities
1923	5.24%	5.77%
1924	5.28%	5.20%
1925	5.17%	5.24%
1926	4.75%	5.08%
1927	4.74%	4.88%
1928	4.41%	4.58%
1929	4.82%	4.93%
1930	4.80%	4.88%
1931	4.70%	4.52%

4. The actual or probable cost of credit money to Appellee in the years 1923 to 1931, inclusive, may have been more or less than the average cost above shown, and the determination thereof depends upon the knowledge of the experience of those companies within the said small group of business undertakings most comparable to Appellee and not upon unsupported general statements in respect to such other business undertakings or of judicial notice by a court in respect thereto.

Capital Stock Securities.

During the period under investigation factors other than the investment position of capital obligations determined their price. As was stated in 1929:

> "Today the attitude on the part of the investors has changed. They want to share in the growth of commerce and industry. They believe that the property of the best railroads, public utilities and industrials is so completely assured that their equities involve no more than a reasonable risk and, furthermore carry a high degree of certainty of income together with a substantial appreciation in price as the country grows."*
>
> "..... Probably for the first time in the history of this country there is a widespread investment movement in the direction of long term investments in stock, wherein the investor looks forward to capital increment rather than to annual dividend return."**

Beginning with 1925 in the case of companies having AAA bonds outstanding, with 1926 in the case of companies having AA, A and BAA bonds outstanding, and with 1928 in the case of companies having BA bonds outstanding, and continuing in each case through 1930 the stocks of these companies sold on a lower yield than their bonds (Appendix, p. 149; R. VII, 4281D). This experience indicates that junior securities did not sell on the basis of their inferior risk position, and is clearly indicative of the change during these years in investment characteristics from that of prior years described by this Court wherein "investors insist on higher yields on stock than current rates of interest on bonds." (*McCardle* v. *Indianapolis Water Co.*, 272 U. S. 400, at 419 (1926).***

*C. A. Dice, New Levels in the Stock Market (1929), p. 2.
**"Confiscatory Rates," 39 Yale Law Journal, 151, at 179 (1929).
***The opinion covered the period 1921 to 1924.

During this period there was an increasing appetite on the part of the investor for capital stock securities. In 1928 over half of all new securities issued were stocks* and in 1929 common stock financing exceeded mortgage bond and debenture financing.**

On December 31, 1922, Appellee had outstanding $19,000,000 bonds issued in 1909, $15,000,000 purchase money obligations covering the Central Union purchase in 1920 (*supra,* 472-3) and $60,000,000 stock (O.R. VI, 2120b). During the years 1923 to 1931, inclusive, Appellee issued $50,000,000 in bonds (to retire such $34,000,000 indebtedness and to provide $11,000,000 additional capital after deducting the discount (*supra,* 472-3)) and $90,000,000

*C. A. Dice, op. cit., p. 238.

**Moody's Manual on Public Utilities for the year 1930 comments on significant trends in financing in the electric light and power industry, as follows (P. XXVI):

"The great volume of financing by electric power and light companies in recent years, warrants some consideration as to the more important trends in methods used and types of securities issued. The general practice over a long period of years and even up to 1928 was to finance properties largely by first mortgage bonds. Due to the stability of the industry and the growing necessity of its product, properties were often mortgaged up to 75 per cent of their value with recognized safety. The equity remained small during the years of expansion, both because of the demands of the investment market for mortgage bonds and because of the desire of promoters to trade on their equity to increase the earning power by establishing a maximum fixed return on the large amounts of new capital demanded. However, with the consequent rapid advance in the prices of common stocks of these companies arising both from a recognition of their investment qualities and the general demand of investors for equity securities, the common stocks began to command a premium which caused a turn by companies to common stock financing. The sale of new stock through bankers and through the offering of rights reached large proportions and common stock financing in 1929, as reported by the Electrical World, exceeded bond and debenture financing for the first time in the history of the industry. The estimated financing in 1929 was as follows: Mortgage bonds, $215,882,500; debentures, $292,200,000; notes, $15,325,000; preferred stock, $286,248,000; and common stock, $505,803,262 of which $63,870,500 represented new issues and $441,932,762 subscribed through rights offered to stockholders. In addition to this financing, $145,000,000 of securities are estimated to have been sold locally to customers, making total financing amounting to $1,460,458,762, which of course includes that done for refunding purposes."

par amount of stock (R. VIII, 4940). As of December 31, 1922, the American Company had outstanding $226,604,800 bonds and $715,083,854 stock, including installments (R. V, 3299); at the end of 1931 the bonds had increased to $471,423,515 and the stock to $1,938,175,376 (R. VIII, 4425). Similarly the Bell System as a unit had outstanding on December 31, 1922, $646,033,165 bonds and $837,007,344 stock (R. V, 3298); at the end of 1931 the bonds had increased to $1,054,824,529 and the stock to $2,172,897,419 (R. VIII, 4428). Such experience is in contrast to that of prior years described by this Court as of 1923, that:

> "About 75 per cent of the capital invested in utilities is represented by bonds. He who buys seeks primarily safety. If he can obtain it, he is content with a low rate of interest."*

This increased appetite for common stocks had several very significant effects on the financing practices of this period, each of which had a definite bearing on the cost of junior financing as an element in the determination of fair return. Among these are the following:

(1) *Companies offered credit securities with stock conversion privileges or with stock purchase warrants attached.* The total amount of such offerings in this period in issues of $5,000,000 or over on the part of public utilities exceeded $1,067,000,000, of industrials exceeded $1,153,000,000, of railroads exceeded $273,000,000 and of Bell System Companies exceeded $200,000,000 (R. VII, 4253, 4258, 4248, 4245). Such financing permitted the utility to attract capital from the original subscriber on a price basis commensurate with that of a security of a senior risk position. To illustrate:

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*Southwestern Bell Telephone Co. v. Public Service Commission, 262 U. S. 276, at 307.

The American Company sold $219,000,000 debentures at par in 1929, convertible into stock, at the option of the holder, at par upon payment of $80 per share. Practically all of these debentures were converted into stock, more than $206,000,000 of stock having been issued in connection therewith by the end of 1931 (R. VIII, 4374). This capital stock was raised on a 5% basis, whereas during the period of such conversion $150,000,000 were sold by the same company at a price which cost it 5.22 per cent and yielded the purchaser 5.03 per cent (R. VII, 4260a).

The International Telephone & Telegraph Company sold $56,911,400 debentures in December, 1928, at 98 (R. VII, 4310), convertible into stock at the option of the holder at the price per share of $64.1564.* By the end of 1930 more than $19,000,000 had been converted into stock.** This capital stock was raised on a 3.18 per cent basis, whereas during the period of such conversion $50,000,000 bonds were sold by the same company at a price which yielded the purchaser 5.25 per cent (R. VII, 4315).

(2) *Companies offered at frequent intervals issues of stock to existing stockholders on a basis more favorable than the yield on open market price on their outstanding stock.* A definite value was thus given to the "right" of each shareholder to buy such new stock. New subscribers would purchase stock at a low yield in the expectation that thereafter they would participate in additional issues on favorable terms and improve the yield on their total investment. To illustrate:

The rights on the American Company's 1928 issue of stock sold from $11.37½ to $16.12½ (R. V, 3208); on its

*Moody's Manual of Public Utilities, 1931, p. 1946.
**Idem. The dividend rate on this stock was 2% (Idem).

1930 issue of stock sold from $17.00 to $21.00 (R. V, 3192). Purchasers subscribed for the American Company's stock offered to the public in 1927 and 1928 on a 4.91 per cent and a 4.78 per cent basis respectively (R. VIII, 4374). Purchasers in the open market were buying at a price which yielded them as low as 2.90 per cent (R. VII, 4233).

In 1930 the American Company exchanged $15,000,000 par amount of its own stock for the stock of the Teletype Corporation and as part of the same transaction turned over the latter stock to Western for $30,000,000 on the basis that the open market price of the American Company's stock given as consideration therefor was $200 per share (R. I, 459). On this basis, the American Company's stock was sold on the basis of a 4½ per cent yield.

CONCLUSION.

The above experience of stock financing in the last decade indicates that the determination of the cost to Appellee for capital obligations in the years under investigation cannot be based upon:

(1) A relation to the actual or probable cost of credit obligations, or unsupported general statements in connection therewith; or

(2) General percentage figure statements which take no account of the varying experience of corporate stock financing during the period under investigation.*

*"In the light of this new development, this modern type of finance, resulting from a new attitude of mind on the part of the common stock investor who looks now to the future by way of securing new shares in capital ownership, rather than to the immediate present by way of annual yields, must there not be a complete revision of such percentage figures as the Supreme Court has had before it in determining the over-all rate?" "Confiscatory Rates," 39 Yale Law Journal, 151, at 180 (1929).

Amount to Be Carried to Surplus.

In the *United Railways* Case this Court held that a utility is constitutionally entitled to have earnings sufficient so that, after paying all expenses of operation, interest and reasonable dividends "there should still remain something to be passed to the surplus account" (280 U. S. 234 at 251-2).

Whether a given rate of return related to a given rate base value will produce the "something to be passed to the surplus account," depends upon the following factors, among others:

(1) Amount of outstanding securities;
(2) Interest rate on credit obligations;
(3) Dividend Rate on stock;
(4) Rate base value to which Rate of Return is to be related.

To illustrate:

Example I:

Assume the following facts, to correspond to those of the *United Railways* Case:

(a) $76,000,000 outstanding capitalization, consisting of $52,000,000 bonds and $24,000,000 stock;
(b) 7% interest rate plus amortization on the bonds;
(c) $75,000,000 Rate Base;
(d) 7.44% Rate of Return on Rate Base.

In this Example

(1) The rate base value is less than the total outstanding capitalization;
(2) The interest rate on credit obligations is high;
(3) The ratio of credit obligations to total capitalization is high (68.4%).

The rate of return must exceed the interest rate by a large margin to produce the reasonable dividends and pass something on to surplus. A 7.44% rate of return will yield 8% on the stock, after interest payments. In view of the high interest rate, an 8% dividend rate would seem necessary, and nothing would remain to pass on to surplus.

Example II:

Modify Example I only to the extent of reducing the interest rate and amortization to 5½% to correspond to the interest rate and amortization on Appellee's credit obligations. The same 7.44% related to the same $75,000,000 rate base would be sufficient to pay interest on the bonds and to yield 11.3 + % on outstanding stock. With bonds yielding 5½%, a dividend rate of 8% on par would be attractive and the amount carried to surplus would represent over 40% of a year's dividend requirements.

Example III:

Modify Example II only to the extent of increasing the rate base to an amount which exceeds the total capitalization by 75% to correspond to the relation of the minimum rate base value as found by the District Court in the period 1923 to 1927, inclusive, when it also found the required minimum rate of return to be 7½% to Appellee's outstanding capitalization applicable thereto (*supra*, 316, 449; Appendix, p. 87). A 7.44% return on a rate base of $133,000,000 will be sufficient to pay the 5½% interest and amortization on the bonds and to yield 29.3% on outstanding capitalization. The amount carried to surplus will represent approximately three years' dividend requirements.

CONCLUSION.

The above examples indicate:

(1) What rate of return related to a given rate base will produce sufficient net income so that "there should still remain something to pass to the surplus account," requires detailed knowledge of the corporate structure of the company to which such rate of return has application.

(2) The above studies of credit and stock obligations show that, at least during the post-war period covered by the litigation, no such uniformity exists in the corporate structure of business undertakings outside the Bell System as to permit judicial notice thereof or general unsupported statements thereon to be accepted as adequate proof to support a finding of confiscation which voids state action.

B.

Unsupported general statements or judicial notice covering returns on investments of corporations outside the Bell System whose entire property values are represented by outstanding securities should not be accepted in support of a finding of confiscation.

No showing was made that any new utility was or could be financed or an existing utility was or could be refinanced during the period of the litigation in the assumed manner of capitalizing every dollar of net book investment, including surplus, and of capitalizing the unrecorded values, due to going value and to revaluation on the basis of the reproduction value of the property computed, as Appellee contended, and as the District Court allowed.

One of the elements of strength of the Bell System, which the American Company uses in its literature to investors, is its conservative corporate structure. It advertises that:

"The high market rating of the American Telephone stock and the high standing of the Bell System securities in general are the result of the stability of the telephone industry, the record of earnings and the conservative financial policy of the Bell System" (R. V, 3435, 3429).

"This strength and the conservative financial structure of the System are reflected in the charts . . . . . These show that on December 31, 1925, surplus and reserves of the Bell System were equal to nearly 37% of total capital obligations, and that the mortgage debt of the System on the same date was less than 18% and funded debt less than 32% of net assets" (R. V, 3439).

"At the end of 1930 the funded debt of the A. T. & T. Co. was less than 15 per cent. of its net assets, while for the Bell System as a whole.....the funded debt was less than 22 per cent. The mortgage debt of the system was under 14 per cent of the book value of the physical property" (R. V, 3422).

That the financial structure has a significance in financing was admitted by Appellee's banker witness (R. I, 208-9). Indeed, this same witness testified in the *United Railways* Case (R. I, 210) that one of the difficulties in financing that company arose from its unbalanced financial structure.*

Appellee's presentation and the District Court's findings give no effect to the factors which have assisted the Bell System to finance on a favorable basis; they apply the rate of return on an assumed basis of capitalization which rarely

*"It seems to me, that the Company has arrived at a critical stage from the standpoint of protecting or improving its credit. The Company at present has what we term an unbalanced financial structure. Its ratio of debt to stock is too large for the Company to endure good credit. There should be a greater proportion of stock, a greater equity above the funded debt, and it seems to me that the Company's endeavor should be, when ever its credit will permit it to do so, to finance by issuing stock in order to improve the ratio of equity securities to those bearing a fixed charge." Testimony of Allen G. Hoyt, Record (United Rys. v. West, 280 U. S. 234 (1930)) volume 2, pp. 533-4.

if ever is met in actual experience,* and which is not a subject matter of judicial notice.

C.

The application of the returns on corporate investments outside the Bell System to test the inadequacy of Appellee's return to its investors from the attacked rates, as found by the District Court, disregards the special character of the return to Appellee's investors resulting from the District Court's findings on Separation of Revenues, License Contract Payments, Depreciation Expense, and Western.

This Court pointed out that Appellee "was not an ordinary public utility company" but was "a component part of a large system to which the benefits of its operations accrue" and which "was organized for the purpose of maintaining the credit of the constituent companies and securing their efficient and economical management" (*Smith* Case, 282 U. S. 133 at 161, 151).

The American Company, as the responsible head of the Bell System, has stated that:

> "The Bell Telephone System occupies a unique position, and one not generally understood, because it differs so widely in form of organization and in relation to the public and the investors from other enterprises to which it might be expected to be similar. In the annual reports which have grown up to be vehicles of information to the public as well as to the stockholders, we have attempted to set forth the reasons why the structure of the System is what it is, what the relations of the parts are to each other and all the other

*The purchase of Dodge Bros. Motor Company by Chrysler Corporation through Dillon Read & Co. is one of the few examples of a complete sell-out on the basis assumed by Appellee and the District Court. (Moody's, Industrials, 1929, p. 1133). But here, the securities of Chrysler Corporation and of Dodge Brothers combined were issued.

facts which should be available to present and prospective investors in the securities of the System" (O.R. VII, 2619, p. 15; O.R. VII, 2678).

The ordinary returns on corporate investments outside the Bell System embrace only the cash income available for return of the issuer corporation, and do not include any advantages of additional profit not otherwise compensated. The District Court's findings on Separation of Revenues (*supra,* 49), License Contract Payments (*supra,* 83), Depreciation Expense (*supra,* 378) and Western's Profits (*supra,* 236) preserved for the American Company, as the equity investor in Appellee, the many advantages of additional profit enumerated above (*supra,* 464) which are not received as part of the return on corporate investments outside the Bell System.

By so doing the District Court preserved substantially all of the burdens on Appellee's operating expenses for the benefit of the American Company under the Mutual Plan of Operation of the Bell System (*supra,* 82), but its findings on Fair Return failed to give effect to the following reciprocal benefits to which Appellee was entitled as consideration therefor from the American Company as its equity investor and as its financing agency:

(*1*) *The American Company has made itself the financing company to provide the permanent capital for the Associated Companies of the Bell System.*

Since February 1, 1919, the American Company has made its consent necessary before Appellee may finance directly with the public through the sale of credit securities (O. R. IV, 1507-8). Since 1911 the financing of permanent capital by Appellee has been either by sale of its stock to its stockholders, which in effect means to the American Company, or by the sale of its credit obligations to the public after the

American Company has consented thereto and made available to the holders of such securities the benefits of the position of Appellee as an operating division of the Bell System (O. R. IV, 1567).

(2) *The American Company, as the financing company, has provided a cooperative plan for the financing of the Associated Companies.*

The American Company has established and uses the following cooperative plan of financing the needs of the Bell System:

(a) The physical assets of the American Company and the physical assets of all of the Associated Companies are pooled to form the rate base upon which the adequate per cent amount of return is calculated in order to attract the investors of the American Company, who are considered the investors of the Bell System (O.R. VII, 2604, (11); 2616 (6-7); 2633 (13)). If the American Company considered itself an operating company of the long distance service and a holding company of capital and credit securities in the Associated Companies, the American Company should consider as a rate base for the purpose just mentioned, the physical assets of the American Company and the book cost or value of such capital and credit securities and not the assets of the American Company plus the book cost or value of the physical assets of such Associated Companies.

(b) All of the earnings in the treasury of the American Company over and above the actual expenses of the Central Administration, plus all of the net earnings of Western, plus all of the earnings of the Long Lines, are pooled with the net earnings of the Associated Companies from their own operations, for the financing of all of the parts of the Bell System (O.R. VII, 2681 (6-7); 2584 (21-22)).

(c) The cash dividends paid to the American Company by the Associated Companies are pooled with the net earnings of its own treasury from the long distance service, from the 4½% payments remaining above the expenses of the Central Administration, from royalties, and with the cash dividends from Western, to form the fund to pay the cash return to its own investors as the investors of the Bell System (O.R. VII, 2681 (6-7)).

(d) The surplus in the treasury of each Associated Company is pooled with the surplus of the net profits of the Central Administration, the surplus of the net profits from Long Lines, to form the combined surplus to safeguard the continuity of dividends to the investors of the Bell System from the American Company.

(e) All of the funds derived by the American Company from its investors are used to finance every part of the Bell System (O.R. VII, 2638 (40); 2655 (40)).

(f) The American Company, by consenting to the pledge by an Associated Company of the latter's rights under its contract defining its relationship to the Bell System, makes available to the holders of the credit securities issued by each such Associated Company, the same benefits of the cooperative financing plan as are available to the stock investors of the American Company as investors of the Bell System. The inter-relation between the market position of these stock investments and the cost of financing and position of the credit obligations issued by the Associated Companies is one factor considered by the American Company itself in determining the necessary cash dividends required to attract its investors and to maintain the market position of their investments (O.R. VII, 2616 (6, 7)).

(3) *The required net earnings from the operations of each Associated Company are admittedly less than the*

minimum per cent return necessary to attract capital or to maintain the stability of its securities under the cooperative plan of financing the Associated Companies of the Bell System.

From the above analysis it is obvious that the net earnings from the operations of Appellee need not be and cannot be as large as if it were operating as an independent enterprise. In the Bell System the net earnings available to attract the capital investors of the Associated Companies—that is, the stockholders of the American Company—are to be found in two treasuries, *i. e.*, that of the Associated Company, and that of the American Company. An examination of the Annual Reports of the American Company beginning with 1914 reveals that the net earnings left in the treasury of the Associated Companies of the Bell System have been far below the combined net earnings available to the investors of the Bell System and below the minimum net earnings which in the case of an independent enterprise would be required to avoid confiscation (O.R. VII, 2670 (8)). Thus we find for the years 1923 to 1930, inclusive, as already shown, the low ratio of net earnings remaining in the treasury of the Associated Companies to the book cost of plant—ranging from 5.36% to 6.48% (R. VII, 4090E, F)—a per cent return admittedly far below the minimum considered legally adequate for independent enterprises when considered on the basis of present value. Yet in each of such years, dividends were earned by practically all of said Associated Companies plus a margin; in each of such years, the American Company, by combining the Bell System earnings in its own treasury with the Bell System earnings in the treasury of the separate companies, has earned its nine per cent dividend plus a margin, as appears from the following statement:

AMERICAN COMPANY—RATE OF RETURN

(R. VIII, 4374a, 4375-92, 4394, 43

	Rate of Return on Entire Investment	Rate of Return on Capital and Surplus Expressed on		Rate of Return on Entire Investment	Rate of Return on Capital and Surplus Expressed on		Rate of Return on Entire Investment	Rate of Return on Capital and Surplus Expressed on		Rate of Return on Entire Investment	Rate of Return on Capital and Surplus Expressed on	
		Outstanding Stock and Surplus	Outstanding Stock		Outstanding Stock and Surplus	Outstanding Stock		Outstanding Stock and Surplus	Outstanding Stock		Outstanding Stock and Surplus	Outstandi Stock
	12/31/23	12/31/23	12/31/23	12/31/24	12/31/24	12/31/24	12/31/25	12/31/25	12/31/25	12/31/26	12/31/26	12/31/26
(1) Holding Co.	7.12	7.49	9.18	7.39	7.91	9.67	7.61	8.27	10.02	7.99	8.70	10.73
(2) Stock in Western	9.06	9.94	12.24	9.06	10.06	12.36	10.19	11.71	14.26	13.59	15.97	19.90
(3) Associated Companies—Stock*												
Appellee	7.18	7.57	9.28	7.16	7.61	9.31	7.28	7.83	9.47	7.34	7.86	9.66
Others	6.59	6.83	8.35	6.95	7.34	8.97	7.01	7.47	9.03	7.35	7.87	9.68
All	6.65	6.90	8.44	6.97	7.37	9.00	7.04	7.51	9.08	7.35	7.87	9.68
(4) License Contract Operations:												
Appellee	18.84	22.25	27.67	18.94	22.81	28.21	12.98	15.43	18.84	9.67	10.88	13.48
Others	8.57	9.32	11.47	8.15	8.89	10.90	8.16	9.00	10.92	7.94	8.64	10.64
All	8.82	9.63	11.86	8.37	9.17	11.25	8.31	9.20	11.16	8.03	8.76	10.79
Long Lines	8.82	9.63	11.86	8.37	9.17	11.25	8.31	9.20	11.16	8.03	8.76	10.79
Total	8.82	9.63	11.86	8.37	9.17	11.25	8.31	9.20	11.16	8.03	8.76	10.79
(5) Long Lines	16.22	18.95	23.53	14.43	16.90	20.97	16.19	19.70	24.12	14.52	17.17	21.42
(6) Entire Company	8.40	9.10	11.20	8.33	9.12	11.15	8.61	9.60	11.66	8.66	9.57	11.83

*Including Capital Stock Installments.

CAN COMPANY—RATE OF RETURN FROM ALL OPERATIONS.

(R. VIII, 4374a, 4375-92, 4394, 4396, 4398)

e of Return a Capital d Surplus ressed on		Rate of Return on Entire Investment	Rate of Return on Capital and Surplus Expressed on		Rate of Return on Entire Investment	Rate of Return on Capital and Surplus Expressed on		Rate of Return on Entire Investment	Rate of Return on Capital and Surplus Expressed on		Rate of Return on Entire Investment	Rate of Return on Capital and Surplus Expressed on		Rate of Return on Entire Investment	Rate of Return on Capital and Surplus Expressed on	
ng d	Outstanding Stock		Outstanding Stock and Surplus	Outstanding Stock		Outstanding Stock and Surplus	Outstanding Stock		Outstanding Stock and Surplus	Outstanding Stock		Outstanding Stock and Surplus	Outstanding Stock		Outstanding Stock and Surplus	Outstanding Stock
5	12/31/25	12/31/26	12/31/26	12/31/26	12/31/27	12/31/27	12/31/27	12/31/28	12/31/28	12/31/28	12/31/29	12/31/29	12/31/29	12/31/30	12/31/30	12/31/30
	10.02	7.99	8.70	10.73	11.76	13.38	16.75	8.29	8.91	11.64	9.01	9.91	13.06	7.84	8.41	11.53
	14.26	13.59	15.97	19.90	101.91	127.16	161.16	20.38	23.76	31.47	29.63	35.65	47.81	16.87	19.47	27.18
	9.47	7.34	7.86	9.66	7.58	8.10	10.06	7.62	8.08	10.54	7.65	8.21	10.76	7.71	8.25	11.31
	9.03	7.35	7.87	9.68	7.38	7.85	9.74	7.47	7.90	10.30	7.47	7.99	10.45	7.22	7.65	10.46
	9.08	7.35	7.87	9.68	7.40	7.88	9.77	7.48	7.91	10.31	7.48	8.00	10.47	7.26	7.70	10.53
	18.84	9.67	10.88	13.48	11.08	12.52	15.67									
	10.92	7.94	8.64	10.64	8.64	9.44	11.76									
	11.16	8.03	8.76	10.79	8.75	9.58	11.93									
	11.16	8.03	8.76	10.79	8.75	9.58	11.93									
	11.16	8.03	8.76	10.79	8.75	9.58	11.94	6.04	6.14	7.95	4.77	4.62	5.90	3.46	3.05	3.95
	24.12	14.52	17.17	21.42	12.47	14.27	17.89	12.97	14.66	19.31	11.91	13.53	17.94	7.92	8.51	11.67
	11.66	8.66	9.57	11.83	11.33	12.84	16.06	8.52	9.19	12.02	8.77	9.61	12.64	7.21	7.64	10.44

The American Company increased its dividends from 8% to 9% in 1921 and has continued to pay the 9% dividend rate throughout the depression (R. V, 3421)—a record equaled by few, if any, other large enterprises.

Nor has the American Company experienced any difficulty either in attracting capital or in maintaining the stability of its securities in comparison with those of other companies with whom it must compete for capital. Indeed, in 1923, the combined showing of the Bell System under the cooperative plan just described was such as to cause the American Company to admit:

> "There are few, if any, important stocks which have greater stability as to earnings than the stock of your company and its market stability may be compared with high grade bonds of railroads and industrial companies rather than with stocks." (O.R. VII, 2646, (12)).

Nor have the credit obligations of the Associated Companies issued to and held by the public suffered as a result of the showing from their own operations in comparison with that of other companies with which the Bell System competed for capital. Their record has been stated above (*supra*, 475, 481, 485).

Nor has the showing of Appellee impaired the stability of its securities in comparison with those of such other enterprises (O.R. VI, 2160; *supra*, 472, 480, 483).

(4) *The yardstick which the American Company would use to test the inadequacy of Appellee's Chicago intrastate return, as found by the District Court, and which gives proper effect to that Court's findings on Revenues and Expenses, is the average per cent return on a comparable basis, on the American Company's investment of the Associated Companies as a whole, as used in fact or as*

found necessary to finance their needs and to maintain the stability of their securities.

The minimum average net earnings from the operations of the Associated Companies as a whole, after having absorbed the costs of providing the American Company with the advantages of additional profit and additional security under the Mutual Plan of Operation, must be such that when pooled with the contributions made by the American Company itself, they will be adequate to attract capital and to maintain the stability of the securities of the Bell System (O.R. VII, 2618 (12)).

The constitutional inadequacy of the rates of any particular Associated Company may therefore be determined by viewing the relation of the net earnings from its own operations to the average required minimum net earnings, on a comparable basis, of all Associated Companies bearing the same relation to the American Company as the Associated Company under investigation, and predicated upon (a) its and their operations having absorbed the costs of services and payments required to be made by it and by them as part of its and their contributions to the operation of the Bell System as a unified single operating entity, and (b) the sufficiency of the average minimum net earnings from the operations of all the Associated Companies when pooled with the contributions by the American Company to such operations, to provide the minimum net earnings which the Bell System as a single operating entity requires to attract capital for the Associated Companies and to maintain the stability of their securities during the period under investigation. In the absence of a showing that the average net earnings from the operations of all Associated Companies are inadequate no issue of confiscation can arise as to the net earnings

from the operations of any single Associated Company so long as such Associated Company's showing is as good as or is better than such average.

This yardstick which the American Company in fact uses as the basis for making its investments in the Associated Companies, but which Appellee abandoned in its presentation in this case, at least has the advantage of being made applicable to comparable and easily available, accumulated data of the experience of the Bell System. Appellants used this yardstick in the application of the "comparative return" test of compensatory rates (*supra*, 489). Such application revealed that Appellee's attacked rates as well as the existing rates were compensatory throughout the period of the litigation.

By using the returns on corporate investment outside the Bell System instead of within the Bell System, the District Court gave no effect to the benefit to Appellee from the cooperative plan of the Bell System to which it was entitled on the basis of the District Court's findings on Revenues and Expenses.

DISCUSSION AS TO CONTENTION NUMBERED V.

V.

APPELLEE'S SHOWING OF THE PERCENTAGE RESULTING FROM THE AMERICAN COMPANY'S AVERAGE CARRYING CHARGES RELATED TO AVERAGE OUTSTANDING CREDIT AND CAPITAL OBLIGATIONS PLUS SURPLUS CANNOT BE USED TO SUPPORT THE DISTRICT COURT'S FINDINGS OF THE REQUIRED MINIMUM RATE OF RETURN AND ON THE INADEQUACY OF THE ATTACKED RATES.

Appellee showed the percentage resulting from the American Company's average carrying charges related to its own average outstanding credit and capital obligations plus surplus. Such percentage for the years 1923 to 1927, inclusive, ranged from 6.83% to 6.93%; for the period 1928 to 1930 ranged from 6.25% to 6.55%; and for the year 1931 was 6.42% (R. IV, 2944). Such showing cannot be used to support the District Court's finding of required minimum rate of return and on the inadequacy of the attacked rates for the following reasons:

(a) The $9 cash dividend rate on the American Company's outstanding stock related to its capital and surplus, does not represent the cash rate of return to its investors on their entire equity investment. The American Company's capital and surplus represents only the equity investment in its *book* asset investment. Such book asset investment only reflects its equity investment in the Associated Companies to the extent of the value at which it has recorded its investment in their common stocks, and reflects

its book property investment in the Long Lines. Such recorded values do not capitalize (a) the surplus of the Associated Companies applicable to the American Company's equity investment therein; (b) the unrecorded values due to the Going Value of these companies and of its Long Lines business, and to revaluation on the basis of the reproduction value of the properties of the Associated Companies and of its own Long Lines property. The American Company established its 9% cash dividend in 1921 on the basis that "the stockholders' equity in the business was about $200 a share; $9 per year per share was less than 5% upon the stockholders' equity in the business and would certainly not be considered as an excessive return" (O.R. VII, 2616). Such equity consisted of the American Company's capital, surplus and reserves, plus the American Company's equity investment in the Associated Companies not reflected on the American Company's books.*

The average capital and surplus of the American Company in 1921 was approximately $129 a share (R. VI, 4010)

*"The Company pays its dividend on a par value of $100, but there is much more than one hundred dollars earning that dividend. Much of the Company's stock has been issued at more than par. The amount paid into the Company's treasury for stock exceeds the capitalization by $36,684,237. The Company has never paid out all of its earnings in dividends, but consistently pursued the policy of employing some part of its earnings in extending and improving its property. So it comes about that through this cash payment of $36,684,237 and the earnings upon that sum and the other earnings left with the Company, surplus and reserves of $154,565,113, or $35 per share, have accumulated which are invested for the stockholders.

Most of this capital and surplus is invested in stocks of associated companies. Many of them have had periods in which they paid no dividends, leaving all of their earnings in the business; and the other periods in which they left a part there. This Company's interest in the amount so accumulated is equivalent to $67 per share of its capital stock, which added to its own surplus and reserves ($35 per share) makes over $200 in assets to earn the dividend upon each $100 par value of its stock." (Annual Report of American Company for 1920, O.R. VII, 2603-4.)

or less than 64½% of its stockholders' equity measured by *recorded property investment* on which the dividend rate was established, but not considering the unrecorded values due to Going Value of the subsidiaries or of the Long Lines business and revaluation on the basis of the reproduction values of their respective properties. The "average cost of funds" for 1921 related to the American Company's outstanding capital and surplus produces a percentage figure of 6.80% (R. VI, 4010), which is at least 1.80%, or 36% higher than the cash return to the American Company's investors related to their property investment (O.R. VII, 2616-7). Similarly in 1921 the return of 7.40% on the capital of the subsidiaries resulted in a return of 7.88% to the American Company related to its capital and surplus (R. VII, 4361; R. IV, 2941).

Nor do such percentage figures give consideration to the unrecorded values resulting from Going Value of the subsidiaries and of the Long Lines business or from revaluation on the basis of the reproduction value of their respective properties.

(b) The average cumulative annual cost of the American Company's credit financing in each of the years under investigation would not represent the average annual cost of current credit financing in each such years. (*Southwestern Bell Tel. Co.* v. *Commission,* 262 U. S. 276, at 305-306.)

The American Company's average cost of credit funds, the American Company's,* Appellee's and Bell System's cost on new bond issues compare as follows:

*On December 31, 1922, the American Company had outstanding $226,604,800 bonds, the carrying charges on which entered in its average cost of funds in the period following thereafter (R. V, 3299).

	American Company's Average Cost of Credit Funds (R. IV, 2941)	Annual Cost of New Bond Issues (R. VII, 4260a) Appellee	American Company	Balance of System
1923	5.69%	5.53%	5.95%	5.33%
1924	5.61			5.70
1925	5.61		5.55	5.19
1926	5.60			5.02
1927	5.58			
1928	5.57			
1929	5.39			5.33
1930	5.30		5.22	5.00
1931	5.60			

Such average cost of funds compares with the average cost of funds on bond issues, aggregating $6,138,000,000, sold during the years 1923-1931 under authorization of the Interstate Commerce Commission and state public service commissions (R. VII, 4285-92).

	COST OF NEW CREDIT MONEY AAA	AA	A	BAA	American Company's Average Cost of Credit Funds (R. IV, 2941)
1923					
Public Utilities Bond Issues (R. VII, 4285) Weighted Average Cost (per cent)	5.77	5.68	6.42	6.62	
Railroad Bond Issues (R. VII, 4274) Weighted Average Cost (per cent)	5.24	5.47	6.52		
American Company's Average Cost of Funds (R. IV, 2941)					5.69
1924					
Public Utilities (R. VII, 4286) Weighted Average Cost (per cent)	5.20	5.67	6.20	7.15	
Railroads (R. VII, 4275) Weighted Average Cost (per cent)	5.28	5.77	6.16	8.11	
American Company's Average Cost of Funds (R. IV, 2941)					5.61
1925					
Public Utilities (R. VII, 4287) Weighted Average Cost (per cent)	5.24	5.70	5.93	5.86	
Railroads (R. VII, 4276) Weighted Average Cost (per cent)	5.17	5.43	6.06		

	COST OF NEW CREDIT MONEY				American Company's Average Cost of Credit Funds (R. IV, 2941)
	AAA	AA	A	BAA	
American Company's Average Cost of Funds (R. IV, 2941-2)					5.61
1926					
Public Utilities (R. VII, 4287-8)					
Weighted Average Cost (per cent)			5.42	6.07	
Railroads (R. VII, 4277)					
Weighted Average Cost (per cent)	4.75	5.08	5.43	5.55	
American Company's Average Cost of Funds (R. IV, 2942)					5.60
1927					
Public Utilities (R. VII, 4288-9)					
Weighted Average Cost (per cent)	4.88	4.96	5.15	5.96	
Railroads (R. VII, 4278-9)					
Weighted Average Cost (per cent)	4.74	4.80	5.12	5.47	
American Company's Average Cost of Funds (R. IV, 2942)					5.58
1928					
Public Utilities (R. VII, 4289-90)					
Weighted Average Cost (per cent)	4.58	4.91	5.25	5.57	
Railroads (R. VII, 4279-80)					
Weighted Average Cost (per cent)	4.41	4.59	4.81	5.25	
American Company's Average Cost of Funds (R. IV, 2943)					5.57
1929					
Public Utilities (R. VII, 4290)					
Weighted Average Cost (per cent)	4.93	5.40	5.73		
Railroads (R. VII, 4280-1)					
Weighted Average Cost (per cent)	4.82	5.00	5.14	5.93	
American Company's Average Cost of Funds (R. IV, 2943)					5.39
1930					
Public Utilities (R. VII, 4291)					
Weighted Average Cost (per cent)	4.88	4.94	5.09	6.40	
Railroads (R. VII, 4281-2)					
Weighted Average Cost (per cent)	4.80	4.85	4.93	5.32	
American Company's Average Cost of Funds (R. IV, 2943-4)					5.30
1931					
Public Utilities (R. VII, 4291-2)					
Weighted Average Cost (per cent)	4.52	4.74	4.93		
Railroads (R. VII, 4283)					
Weighted Average Cost (per cent)	4.70	4.75	5.40	4.94	
American Company's Average Cost of Funds (R. IV, 2944)					5.60

(c) Current stock financing would not involve an annual cost equal to that resulting from the American Company's 9% dividend rate related to its capital and surplus

during each of the years under investigation (*Southwestern Bell Tel. Co.* v. *Commission*, 262 U. S. 276, at 305-306):

1923	7.18%	1927	7.20%
1924	7.20	1928	6.77
1925	7.37	1929	6.81
1926	7.20	1930	6.46*

Western justified its payment of $30,000,000 to the American Company for the stock of the Teletype Corporation on the ground that the American Company paid therefor $15,000,000 in stock, but this stock had a market value of at least $200 a share, on which basis the yield would be 4½% (R. I, 458). On the other hand, the annual cost computation gave effect to a return of 6.25% (R. IV, 2944).

As bearing upon the return which stock investors received during this period from stock investments in companies whose bonds are comparable to those of the American Company, Appellants point out that the annual yield (based on cash dividends related to the resale price), to holders of stock in public utilities whose Triple-A bonds sold to the public in the years 1925-1930, and for the first three-quarters of the year 1931, was lower than the yield on resale price of the Triple-A bonds (R. VII, 4218d; R. II, 1747), as follows:**

---

*On the basis of the open market this yield to the investor was (R. VII, 4233):

1923	7.27½%
1924	7.05½
1925	6.54½
1926	6.20
1927	5.44
1928	4.74½
1929	3.78
1930	4.28
1931	6.24½

**The chart (R. VII, 4218d) showing the average yield (based on cash dividend related to the resale price) on common stocks compared with average yield on bonds grouped according to Moody's Rating of the companies' bonds is reproduced herein (Appendix, p. 149).

	Average Yield on Resale Prices	
	AAA Bonds	Stocks Behind AAA Bonds
1925	4.90	4.96
1926	4.84	4.58
1927	4.69	4.38
1928	4.71	3.87
1929	4.85	3.25
1930	4.71	3.62
1931	4.71	4.97

(d) It is not the fact that the difference between the prognosticated rate of return and the percentage figure resulting from its computation on the basis of the American Company's "average cost of funds" would produce the necessary, but only the necessary, margin of safety over and above the cash dividends, and no more (R. II, 1364-5; R. I, 217).

The margin of safety for the interest and amortization requirements on credit obligation lies in the entire amount of earnings available for the stock—no question arises that a margin of safety in addition thereto would be required as a minimum return to sell such securities.

The following table shows that the percentage of combined capital and surplus equal to the difference between the prognosticated return and Appellee's computed "average annual cost of funds percentage" will provide more than the margin of safety on dividends contemplated by such prognosticated return:

Year	Actual Dividend Payments to American Co. Stockholders Related to Capital Stock and Surplus (R. IV, 2941-4)	Per Cent of Return on Total Funds of American Co. Required to Yield 8% on Capital Stock and Surplus for the Years 1923 to 1927, Inclusive, and 7% for the Years 1928 to 1930, Inclusive (R. IV, 2941)	Yield Available to American Co. Stockholders on Capital Stock and Surplus from 8% Return on Total Funds for the Years 1923 to 1927, Inclusive, and 7% for the Years 1928 to 1930, Inclusive (R. IV, 2941)
1923....	7.17%	7.52%	8.62%
1924....	7.23	7.43	8.75
1925....	7.38	7.38	8.84
1926....	7.22	7.41	8.78
1927....	7.21	7.47	8.68
1928....	6.77	6.73	7.34
1929....	6.81	6.68	7.00
1930....	6.45	6.68	7.40

(e) The rate of return which would be required to finance the American Company would not be the rate of return required to finance Appellee. As the entire rate of return to the American Company's investors consists of "net cash income available for return" and no more, they would not receive the advantages of pecuniary profit received by the American Company as Appellee's investor as part of the return on its equity investment in Appellee which are not received by the American Company's investors. For the reasons stated, the difference between the character of the return to the American Company's investor and to the American Company as investor in Appellee makes them incomparable.

CONCLUSION.

The District Court erred in not finding that the attacked telephone rates were constitutionally adequate for each year of the litigation, in not dismissing the bill of complaint, in not dissolving the temporary injunction, and in

not ordering a refund of all sums collected by Appellee in excess of the rates prescribed by the Order of August 16, 1923, and interest thereon. Such amounts are (R. VII, 4082):

	Principal a	5% Simple Interest b	Total of a & b
1923	$ 527,926	$213,301	$ 741,227
1924	2,124,632	792,003	2,916,635
1925	2,181,614	704,313	2,885,927
1926	2,203,556	601,073	2,804,629
1927	2,221,798	495,141	2,716,939
1928	2,168,357	375,168	2,543,525
1929	2,060,444	253,693	2,314,137
1930	1,879,411	138,369	2,017,780
1931	1,632,466	38,372	1,670,838
1932 Not available from record.			
1933 Not available from record.			
Total	$17,000,204	$3,611,433	$20,611,637

Respectfully submitted,

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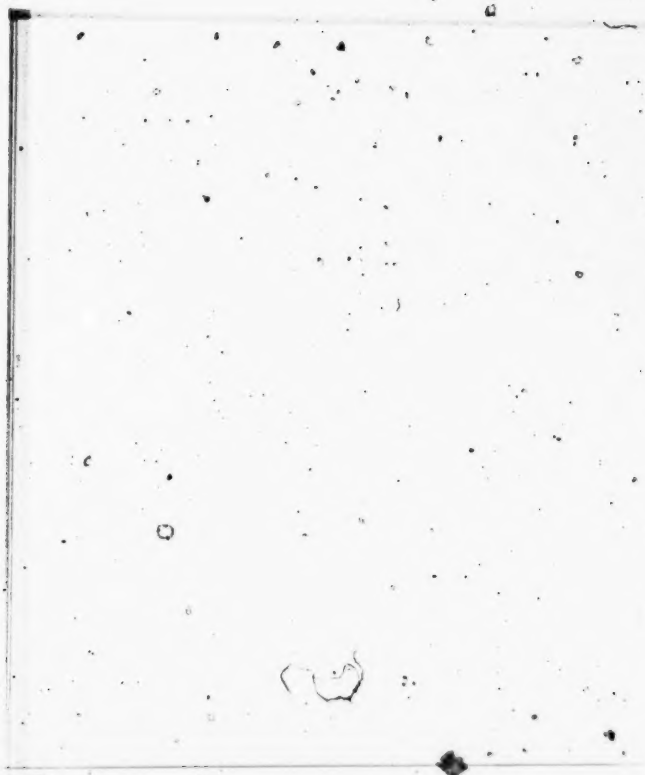

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IN THE

Supreme Court of the United States

OCTOBER TERM, A. D. 1933.

No. 440

BENJAMIN F. LINDHEIMER, ERNEST J. KRUETGEN, ANDREW OLSON, G. GALE GILBERT, PHIL. W. COLLINS, PAUL SAMUELL and CHARLES E. BYRNE, the persons constituting the Illinois Commerce Commission of the State of Illinois, and OTTO KERNER, Attorney General of the State of Illinois,

Appellants,

and

CITY OF CHICAGO, a municipal corporation,

Appellant,

vs.

ILLINOIS BELL TELEPHONE COMPANY,

Appellee.

APPEAL FROM DISTRICT COURT OF THE UNITED STATES, FOR THE NORTHERN DISTRICT OF ILLINOIS, EASTERN DIVISION (3746).

APPENDIX TO APPELLANTS' BRIEF AND ARGUMENT.

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APPENDIX TO APPELLANTS' BRIEF.
Table of Contents.

	PAGE
Separation of Revenues	1-45
License Contract Services and Payments	46-69
Western's Profits and Prices	70-85
Rate Base Value	86-94
Depreciation Expense Charges	95-115
Fair Return	118-149

Index to Appendix.

American Company:
- Appropriations to reserve for contingencies 52-53
- History of depreciation reserve account 48
- Stockholdings in Associated Companies (see Stock)
- Western Bonus Stock 66

Appellee:
- Bond Issues—(see Bonds)
- Capitalization compared with District Court's finding of fair value 87
- Chicago Exchange Stations and Revenues 37
- Fair value—breakdown of District Court's finding of fair value 86
- Provisional Estimates 130
- Rate of return based upon Appellants' contentions (see Return)
- Rate-making History 1
- Recorded net cash return from existing rates (see Return)
- Resale price on Appellee's bonds 137, 141
- Sales of capital stock (See Stock)
- Undepreciated book investment in service in buildings and central office equipment 96

PAGE

Associated Companies:

Development and Research Expenses alleged to have present application to plant in operation.. 57

Difference between Appellee's net income based on District Court's required minimum return and based on average return earned by other Associated Companies 133

Dividend rates 1914 to 1930..... 136

Resale price on bonds compared with bonds of other Public Utilities (See Bonds)

Bonds:

Appellee's compared with other public utilities'.137, 141

Associated Companies' compared with other public utilities'.....138-140, 142, 145-148

Compared with stocks 1923-1931 149

Resale yields in 1931 143

Capital:

Appellee's Capitalization—1881-1922 126

Capitalization of Appellee compared with District Court's findings on rate base value..... 87

Capitalization of Appellee compared with Appellants' contention for Rate Base..... 88

Depreciation Expense Charges:

Appellee's claimed and recorded charges..... 95

Appellee's recorded charges compared with allowance fixed by Commission's 1920 Order..... 96

Appellee's recorded charges compared with allowance fixed under Commission's 1923 Order.... 96

District Court's allowance on..... 95

Statutory provisions regarding.....97-115

Understatement of net cash return due to Appellee's failure to comply with Commission's 1920 Order 136

PAGE

Depreciation Reserve:
- Appellee's book depreciation reserve on Court's finding of depreciation expense 87
- Depreciation reserve based on District Court's expense finding compared with District Court's deduction for depreciation in valuation..... 87

Development and Research Expenses:
- Allocable to Chicago Intrastate..... 55
- Carrier on Cable Expenses..... 63
- Carrier Telephone Equipment and Circuit Expenses 63
- Class I Expenses..... 56
- Class II Expenses..... 57
- Class III Expenses..... 58
- Cross Induction, Voice Frequency and Miscellaneous Expenses 65
- Effect of Charging to Capital Account and to Current Operating Expense 68
- Long Lines Broadcasting Revenues..... 60
- Long Lines Revenues from Telegraph and Teletypewriter 62
- Picture Transmission Expenses..... 62
- Protection Expense 55
- Radio Expenses 59
- Telegraph and Teletypewriter Services Expenses 61
- Television Expenses 64
- Vacuum Tubes Expenses..... 64
- Western Sales of Radio Receiving and Transmitting Apparatus 60

Expenses:
- Depreciation Expense Charges (See Depreciation Expense Charges)
- Items contested by Appellants..... 54

PAGE

License Contract costs properly allocable to Appellee on Appellants' contentions..... 54

Fair Return (See Return; Rate of Return)

Index numbers—effect of variables on..... 89

License Contract Expenses:

Allocable costs on Appellants' contentions..... 54

Departmental Costs 46

Development and Research Expense allocable to Chicago Intrastate business (See Development and Research)

Effect of charging patent infringement liability charges to capital account and to current operating expenses 47

Provisional Estimates:

Appellee's actual and estimated earnings.....130-133

Rate Base Value:

Analysis of Appellee's book costs..... 93

Analysis of excess of District Court's finding over average book cost..... 93

Appellee's reproduction cost new estimate of telephone plant (Dec. 31)..... 93

Breakdown of District Court's finding of fair value 86

District Court's deduction for depreciation in valuation 87

District Court's finding compared with Appellee's capitalization 87

Index numbers—effect of variables on..... 89

Rate Base Value—on Appellants' contentions.... 88

Rate Base Value—on Appellants' contentions—compared with Appellee's capitalization..... 88

PAGE

Rate of Return:

Appellee's rate of return on Appellants' contentions 135

As found by Public Utilities Commission in Order of December 20, 1920, revised to basis of valuation used by District Court.....121-123

On Intrastate Toll..... 124

Cost of Money (See Bonds)

Reconciliation of District Court's findings of intrastate revenues, expenses and rate of return..... 128

Return:

Appellee's net income on District Court's minimum return compared with Associated Companies 138

Amount for surplus on District Court's finding of net cash return under attacked rates..... 129

Amount for surplus on District Court's finding of minimum cash return to avoid confiscation..... 130

Amount for surplus on District Court's finding of Appellee's recorded intrastate net income,.. 126

Comparison of Appellee's recorded net cash return with District Court's finding of net cash return from attacked rates..... 121

Comparison of Appellee's recorded net cash return with District Court's required minimum cash return 118

Comparison of District Court's finding of net cash return from existing rates with Appellee's recorded net cash return..... 119

Estimated return on Appellee's capital stock allocable to Chicago intrastate business..... 127

Reduction in net income on District Court's finding 120

Understatement of net cash return due to Appellee's failure to comply with Commission's 1920 order on depreciation expense charges..... 136